2015-2016
College Catalog &
Student Handbook
For the most up-to-date information,
go to www.jtcc.edu.
# Academic Calendar 2015-2016

## FALL 2015

### 16-Week Session
- **Classes begin:** August 24
- **Last day to add:** August 28
- **Labor Day (College closed):** September 7
- **Last day to drop w/refund:** September 10
- **Thanksgiving Break (College closed):** November 25 - November 29
- **Classes end:** December 12
- **Final exams:** December 14 - December 19
- **Grades due:** December 21, 9:00 a.m.

### 12-Week Session
- **Classes begin:** September 8
- **Last day to add:** September 11
- **Last day to drop w/refund:** September 21
- **Founders Day (No classes):** October 6
- **Last day to withdraw:** October 30
- **Classes end:** December 5
- **Final exams:** Last day of scheduled class
- **Grades due:** December 21, 9:00 a.m.

### MTE CLASSES ONLY

#### 1st 4-Week Session
- **Classes begin:** August 24
- **Last day to add:** August 25
- **Labor Day (College closed):** September 7
- **Last day to drop w/withdraw:** September 21
- **Classes end:** September 21
- **Final exams:** Last day of scheduled class
- **Grades due:** December 21

#### 2nd 4-Week Session
- **Classes begin:** September 22
- **Last day to add:** September 23
- **Last day to drop w/withdraw:** September 25
- **Founders Day (No classes):** October 6
- **Last day to withdraw:** October 8
- **Classes end:** October 20
- **Final exams:** Last day of scheduled class
- **Grades due:** December 21

#### 3rd 4-Week Session
- **Classes begin:** October 21
- **Last day to add:** October 22
- **Last day to drop w/withdraw:** October 26
- **Last day to withdraw:** November 6
- **Classes end:** November 17
- **Final exams:** Last day of scheduled class
- **Grades due:** December 21

#### 4th 4-Week Session
- **Classes begin:** November 18
- **Last day to add:** November 19
- **Last day to drop w/withdraw:** November 23
- **Thanksgiving Break (College closed):** November 25 - November 29
- **Classes end:** December 7
- **Final exams:** Last day of scheduled class
- **Grades due:** December 21

## SPRING 2016

### 16-Week Session
- **Classes begin:** January 11
- **Last day to add:** January 13
- **Last day to drop with a refund:** January 19
- **Martin Luther King Holiday (College closed):** January 18
- **Last day to withdraw:** March 28
- **Classes end:** March 7
- **Final exams:** Last day of scheduled class
- **Commencement:** May 13

### 12-Week Session
- **Classes begin:** January 25
- **Last day to add:** January 28
- **Last day to drop with a refund:** February 8
- **Spring Break (no classes):** March 21-27
- **Last day to withdraw:** April 25
- **Final exams:** Last day of scheduled class
- ***Reading Day (no classes):** May 3
- **Commencement:** May 13

### MTE Classes Only

#### 1st 4-Week Session
- **Classes begin:** January 11
- **Last day to add:** January 12
- **Last day to drop with a refund:** January 14
- **Martin Luther King Holiday (College closed):** January 18
- **Last day to withdraw:** January 27
- **Classes end:** March 8
- **Final exams:** Last day of scheduled class
- **Commencement:** May 13

#### 2nd 4-Week Session
- **Classes begin:** February 9
- **Last day to add:** February 10
- **Last day to drop with a refund:** February 25
- **Last day to withdraw:** March 28
- **Classes end:** April 11
- **Final exams:** Last day of scheduled class
- **Commencement:** May 13

#### 3rd 4-Week Session
- **Classes begin:** March 8
- **Last day to add:** March 9
- **Last day to drop with a refund:** March 14
- **Spring Break (no classes):** March 21-27
- **Last day to withdraw:** April 11
- **Classes end:** May 10
- **Final exams:** Last day of scheduled class

#### 4th 4-Week Session
- **Classes begin:** April 12
- **Last day to add:** April 13
- **Last day to drop with a refund:** April 15
- **Last day to withdraw:** April 28
- ***Reading Day (no classes):** May 3
- **Commencement:** May 13
- **Final exams:** Last day of scheduled class
- **Commencement:** May 13

* Reading Day is intended to give students an additional day of study. Use it wisely!

## SUMMER 2016

- **General Registration begins in April. Sessions start in May, June and July.**
- **Final summer calendar will be available by October at www.jtcc.edu/academics/academic-calendar.**
Welcome to John Tyler Community College. I believe you will find John Tyler to be a welcoming environment, with dedicated faculty and staff who offer challenging classes, unique learning opportunities, and important student support services. For more than 45 years, the residents of Amelia, Charles City, Chesterfield, Colonial Heights, Dinwiddie, Hopewell, Petersburg, Prince George, Surry, Sussex, and surrounding localities have relied upon John Tyler to provide flexible and innovative programs and classes that prepare students for immediate entry into the workforce and college transfer, as well as career changes and advancements. Our graduates go on to become business owners, community leaders, and top graduates at four-year colleges and universities. We look forward to helping you reach your goals, and we are excited to see where your John Tyler education takes you.

Sincerely,

Dr. Edward “Ted” Raspiller
President, John Tyler Community College
Nondiscrimination Policy

John Tyler Community College (JTCC) does not discriminate on the basis of race, color, national origin, age, gender, sexual orientation or disability in its programs or activities. Also, JTCC does not discriminate against pregnant and/or parenting students. Inquiries related to the College's nondiscrimination policy should be directed to Ms. Sandra Kirkland, Dean of Students, or Michelle Spencer, Assistant Dean of Student Development. Ms. Kirkland can be reached by mail at 13101 Jefferson Davis Highway, Chester, VA 23831, by e-mail at skirkland@jtcc.edu or phone at 804-706-5208/804-594-1566. Ms. Spencer can be reached by mail at 13101 Jefferson Davis Highway, Chester, VA 23831, by e-mail at mspencer@jtcc.edu or phone at 804-706-5067/804-594-1534. Please note that any gender-based discrimination or sex-based discrimination to include sexual misconduct should be directed to Sandra Kirkland, Dean of Students and Title IX Coordinator and/or Michelle Spencer, Assistant Dean of Student Development, and Deputy Title IX Coordinator. Please refer to the JTCC Title IX policy at www.jtcc.edu/downloads/about/Section_19_1913.pdf for policy and procedures related to Title IX.

Content Disclaimer

John Tyler Community College provides its web site, catalog, handbooks and any other printed materials or electronic media for your general guidance. The College does not guarantee that the information contained within them, including, but not limited to, the contents of any page that resides under the DNS registration of www.jtcc.edu, and the associated social media sites of www.facebook.com/johntylercc, www.twitter.com/johntylercc, www.flickr.com/johntylercc, www.instagram.com/johntylercc and www.youtube.com/johntylercommcollege, is up-to-date, complete and accurate, and individuals assume any risks associated with relying upon such information without checking other credible sources, such as a student’s academic program advisor or a member of the counseling office. In addition, a student’s or prospective student’s reliance upon information contained within these sources, or individual program catalogs or handbooks, when making academic decisions does not constitute, and should not be construed as, a contract with the College. Further, the College reserves the right to make changes to any provision or requirement within these sources, as well as changes to any curriculum or program, whether during a student’s enrollment or otherwise.

Links for references to other materials and web sites provided in the above-referenced sources are also for information purposes only and do not constitute the College’s endorsement of products or services referenced.

Photography and Video

Photographs and videos taken at John Tyler Community College and at College-sponsored events may be used in the College’s print, television/video and web-based advertising, promotions and publications.

Doing Our Part: This publication is printed on 30% recycled fiber and with chlorine-free pulp using timber from managed forests. Certified by the Forest Stewardship Council.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Calendar 2015 – 2016</td>
<td>1</td>
</tr>
<tr>
<td>General Information</td>
<td>5</td>
</tr>
<tr>
<td>History of the College</td>
<td>6</td>
</tr>
<tr>
<td>Institutional Purpose</td>
<td>6</td>
</tr>
<tr>
<td>Accreditations</td>
<td>7</td>
</tr>
<tr>
<td>Educational Programs and Outcomes</td>
<td>7</td>
</tr>
<tr>
<td>Transferring to Other Institutions</td>
<td>9</td>
</tr>
<tr>
<td>Instructional Technology</td>
<td>9</td>
</tr>
<tr>
<td>Great Expectations</td>
<td>10</td>
</tr>
<tr>
<td>On-Ramp Program</td>
<td>10</td>
</tr>
<tr>
<td>Partnership to Ensure Educational Reform (PEER)</td>
<td>10</td>
</tr>
<tr>
<td>International Education Program</td>
<td>10</td>
</tr>
<tr>
<td>Workforce Development – Community College Workforce Alliance</td>
<td>10</td>
</tr>
<tr>
<td>Admission Information</td>
<td>11</td>
</tr>
<tr>
<td>Academic Advising and Class Registration</td>
<td>15</td>
</tr>
<tr>
<td>Academic Information and Policies</td>
<td>16</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>19</td>
</tr>
<tr>
<td>Financial Assistance</td>
<td>20</td>
</tr>
<tr>
<td>Military and Veterans Education</td>
<td>21</td>
</tr>
<tr>
<td>Scholarships</td>
<td>22</td>
</tr>
<tr>
<td>Graduation Procedures</td>
<td>23</td>
</tr>
<tr>
<td>Student Conduct</td>
<td>26</td>
</tr>
<tr>
<td>Academic Dishonesty</td>
<td>29</td>
</tr>
<tr>
<td>Student Disciplinary Policies and Procedures</td>
<td>30</td>
</tr>
<tr>
<td>Student Grievance Policies and Procedures</td>
<td>32</td>
</tr>
<tr>
<td>Student Grade Appeal Policy</td>
<td>33</td>
</tr>
<tr>
<td>Policy on Sexual Violence, Domestic Violence, Dating Violence and Stalking</td>
<td>34</td>
</tr>
<tr>
<td>Student Substance Abuse Policy</td>
<td>42</td>
</tr>
<tr>
<td>VCCS Computer Ethics Policy</td>
<td>46</td>
</tr>
<tr>
<td>Campus Safety and Security</td>
<td>49</td>
</tr>
<tr>
<td>Policy on Weapons on Campus</td>
<td>51</td>
</tr>
<tr>
<td>On-Campus Student Information</td>
<td>52</td>
</tr>
<tr>
<td>Parking</td>
<td>55</td>
</tr>
<tr>
<td>Unscheduled Closings</td>
<td>55</td>
</tr>
<tr>
<td>Telephones</td>
<td>55</td>
</tr>
<tr>
<td>Bulletin Boards</td>
<td>55</td>
</tr>
<tr>
<td>Lost &amp; Found</td>
<td>55</td>
</tr>
<tr>
<td>Student Lounges</td>
<td>55</td>
</tr>
<tr>
<td>Eating and Drinking in Classrooms</td>
<td>55</td>
</tr>
<tr>
<td>Tobacco Products on Campus</td>
<td>55</td>
</tr>
<tr>
<td>Minors on Campus</td>
<td>55</td>
</tr>
<tr>
<td>Recruiters on Campus</td>
<td>55</td>
</tr>
<tr>
<td>Appropriate Attire</td>
<td>55</td>
</tr>
<tr>
<td>Majors</td>
<td>55</td>
</tr>
<tr>
<td>Transfer Degrees</td>
<td>59</td>
</tr>
<tr>
<td>Applied Arts Degrees</td>
<td>81</td>
</tr>
<tr>
<td>Applied Science Degrees</td>
<td>87</td>
</tr>
<tr>
<td>Certificates</td>
<td>119</td>
</tr>
<tr>
<td>Career Studies Certificates</td>
<td>127</td>
</tr>
<tr>
<td>Course Descriptions</td>
<td>153</td>
</tr>
<tr>
<td>Governance</td>
<td>207</td>
</tr>
<tr>
<td>Faculty and Staff</td>
<td>211</td>
</tr>
<tr>
<td>Advisory Committees</td>
<td>227</td>
</tr>
</tbody>
</table>
General Information
John Tyler Community College is a two-year public institution of higher education established as part of a statewide system of community colleges. John Tyler Community College serves primarily the residents of the cities of Colonial Heights, Hopewell and Petersburg, as well as the counties of Amelia, Charles City, Chesterfield, Dinwiddie, Prince George, Surry and Sussex.

John Tyler Community College operates under policies established by the State Board for Community Colleges and the College Board. It is financed by student tuition and state funds, supplemented by contributions from the 10 localities in its service region.

HISTORY OF THE COLLEGE
John Tyler Community College opened the doors of its Chester Campus on October 2, 1967, as a result of the 1964 passage of the legislation establishing two-year technical colleges across the Commonwealth of Virginia.

The Appomattox Basin Industrial Development Corporation, providing the regional leadership for the establishment of John Tyler Community College, submitted an application to the State Board of Technical Education on January 27, 1965, requesting assistance in the establishment of a technical college in the region. In the absence of an official name, this new institution was designated the Chesterfield Region Technical College until December 2, 1965, when the board voted unanimously to name it the John Tyler Technical College.

An action of the 1966 Virginia General Assembly expanded the curricula to include—in addition to technical education—adult education, as well as freshman and sophomore courses for transfer to four-year colleges and universities. The name of the College officially became John Tyler Community College on June 29, 1966, to correspond with the expanded curricula.

The Chester Campus is currently comprised of six buildings: an administrative building, a student and community center, three academic buildings and a physical plant facility. The library and learning resources center are located in Moyar Hall, the largest of the academic buildings.

To meet the increasing needs of the service area, an outreach center was opened in the Midlothian area of Chesterfield County in 1981. This undertaking was expanded in 1984 when the institution opened a facility known as the Watkins Annex. During the summer of 1989, the College moved its Midlothian operation from the Watkins Annex to the Featherstone Professional Center.

The Midlothian Campus opened in May 2000. This campus includes four buildings: an administrative building, two academic buildings and a warehouse/physical plant facility, with a third academic building opening in January 2016. The library is located in Hamel Hall.

The Featherstone Professional Center continues to be the site of John Tyler Community College workforce development training. Nursing instruction is housed in the JTCC Nursing Education Center on the Johnston-Willis Campus of CJW Medical Center.

During the 2014–2015 academic year, John Tyler Community College served nearly 14,000 credit students in nearly 60 programs and specializations.

INSTITUTIONAL PURPOSE
College Mission
John Tyler Community College provides quality educational opportunities that inspire student success and community vitality.

College Vision
A success story for every student.

College Goals
1. To enhance and promote excellence in teaching and learning.
2. To provide access to educational opportunities for persons from all segments of society.
3. To provide a comprehensive program of student development services.
4. To develop and foster mutually beneficial relationships with external constituencies to meet the educational and economic needs of the region.
5. To provide excellent administrative services, fostering accountability and efficiency.
6. To administer integrated and transformative institutional assessment and planning processes.
7. To maximize external funding to support the mission of the College.
8. To strengthen a positive image of the College and effectively promote services and programs to the community.
9. To encourage a positive organization, which attracts and retains a diverse and highly competent workforce.

Code of Ethics
• We are committed to learning environments that foster academic integrity.
• We will be good stewards of our resources and make effective and efficient use of them, thereby ensuring accountability to the Commonwealth of Virginia and to the communities we serve.
• We will maintain the confidentiality and security of information entrusted to us and share information only when authorized or required by law to do so.
• We will not accept any gift, favor, loan, service, business or professional opportunity from anyone knowing (or when it should be known) that it is offered in order to improperly influence the performance of our public duties. We will avoid even the appearance of a conflict of interest.
• We will offer good faith and fair dealings to all those we serve and to each other. Our communications will be civil and professional.
• We will offer employment opportunities in accordance with state, federal and system policies supporting the rights and recognizing the needs of all citizens regardless of gender, age race, color, religion, national origin, disability, veteran status, or political affiliation.
• We encourage and expect all members of the community to act in good faith and bring to the attention of the appropriate official any violation or potential violation of these principles.
The Purpose of the Virginia Community College System
The basic purposes of the comprehensive community college, as prescribed by the General Assembly of Virginia in the Community College Act of 1966, are to prepare students for employment, for advanced collegiate education and for improved citizenship. In accordance with this purpose, the College offers the following:
1. Freshman and sophomore courses for transfer to baccalaureate degree programs—the Associate of Arts and Associate of Science degrees;
2. Occupational and technical programs leading to the Associate of Applied Science and the Associate of Applied Arts degrees;
3. Vocational education leading directly to employment—Certificates and Career Studies Certificates; and
4. Courses in general and continuing education in all fields.

ACCREDITATIONS
John Tyler Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award degrees, certificates, and career studies certificates. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of John Tyler Community College.

The Funeral Services Program at John Tyler Community College is accredited by the American Board of Funeral Service Education (ABFSE), 3414 Ashland Avenue, Ste. G., St. Joseph, MO, 64506, 816-233-3747, Web: www.abfse.org. It is also approved by the State Board of Funeral Directors and Embalmers.

The Nursing Program is approved by the Virginia Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326; 404-975-5000).

The John Tyler Community College Emergency Medical Services Intermediate Program is accredited by the Virginia Department of Health Office of Emergency Medical Services (www.vdh.virginia.gov/oems) upon the recommendation of Division of Educational Development.

The Precision Machining Technology Program is accredited by the National Institute for Metalworking Skills, Inc. (NIMS).

The Welding Program is accredited by the American Welding Society (AWS) Schools Excelling through National Skills Standards Education (SENSE) program.

EDUCATIONAL PROGRAMS AND OUTCOMES

Programs That Lead to a Degree or Certificate
Complete descriptions of the associate degrees, certificates and career studies certificates offered by John Tyler Community College are found on pages 59-152 of this catalog. The following sections summarize the College’s various programs:

University Parallel/College Transfer Program
The university parallel/college transfer program includes college freshman and sophomore courses in general studies, liberal arts, business administration, engineering and other disciplines, meeting standards acceptable for transfer to baccalaureate degree programs at four-year colleges and universities. Students who complete these programs are awarded the Associate of Arts (A.A.) or the Associate of Science (A.S.) degree. These degrees include a core of at least fifteen semester hours of general education courses.

Occupational and Technical Programs
The occupational and technical educational programs are designed to meet the increasing demand for technicians, semi-professional workers and skilled workers for employment in industry, business, the professions and government. The curricula are planned primarily to provide workers for the region being served by John Tyler Community College. Some degrees do provide transfer opportunities to selected four-year colleges and universities.

Associate of Applied Arts Degree
The Associate of Applied Arts (A.A.A.) degree is awarded to students majoring in one of the occupational-technical curricula whose primary goal usually is to obtain full-time employment immediately upon graduation from the College, although a substantial number of students in certain A.A.A. degree programs transfer to four-year colleges and universities. All of the A.A.A. degrees include a core of at least 15 semester hours of general education courses.

Associate of Applied Science Degree
The Associate of Applied Science (A.A.S.) degree is awarded to students majoring in one of the occupational-technical curricula whose primary goal usually is to obtain full-time employment immediately upon graduation from the College, although a substantial number of students in certain A.A.S. degree programs transfer to four-year colleges and universities. All of the A.A.S. degrees include a core of at least 15 semester hours of general education courses.

Certificate
The certificate (C) is awarded to students who complete an approved, non-degree curriculum of at least 30 credits but less than 59 credits.

Career Studies Certificate
The career studies certificate (C.S.C.) is awarded to students who complete an approved, non-degree curriculum of at least nine credits but less than 30. Note for C.S.C. programs only: Financial aid may be available for C.S.C.s that have at least 16 total credit hours.

General Education Outcomes
John Tyler Community College is committed to providing its students a broad and integrated educational experience that will enable them to acquire the knowledge, skills, attitudes and values associated with a productive and fulfilling life. Graduates of John Tyler Community College’s associate degree
programs should have developed capabilities in the following areas:

1. Communication
   A competent communicator can interact with others using all forms of communication, resulting in understanding and being understood. Degree graduates will demonstrate the ability to:
   • Understand and interpret complex materials
   • Assimilate, organize, develop, and present an idea formally and informally
   • Use standard English
   • Use appropriate verbal and non-verbal responses in interpersonal relations and group discussions
   • Use listening skills
   • Recognize the role of culture in communication

2. Critical Thinking
   A competent critical thinker evaluates evidence carefully and applies reasoning to decide what to believe and how to act. Degree graduates will demonstrate the ability to:
   • Discriminate among degrees of credibility, accuracy, and reliability of inferences drawn from given data
   • Recognize parallels, assumptions, or presuppositions in any given source of information
   • Evaluate the strengths and relevance of arguments on a particular question or issue
   • Weigh evidence and decide if generalizations or conclusions based on the given data are warranted
   • Determine whether certain conclusions or consequences are supported by the information provided
   • Use problem-solving skills

3. Cultural and Social Understanding
   A culturally and socially competent person possesses an awareness, understanding, and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national, and global communities. Degree graduates will demonstrate the ability to:
   • Assess the impact that social institutions have on individuals and culture—past, present, and future
   • Describe their own as well as others' personal ethical systems and values within social institutions
   • Recognize the impact that arts and humanities have upon individuals and cultures
   • Recognize the role of language in social and cultural contexts
   • Recognize the interdependence of distinctive world-wide social, economic, geopolitical, and cultural systems

4. Information Literacy
   A person who is competent in information literacy recognizes when information is needed and has the ability to locate, evaluate, and use it effectively. (Adapted from the American Library Association definition.) Degree graduates will demonstrate the ability to:
   • Determine the nature and extent of the information needed
   • Access needed information effectively and efficiently
   • Evaluate information and its sources critically and incorporate selected information into his or her knowledge base
   • Use information effectively, individually or as a member of a group, to accomplish a specific purpose
   • Understand many of the economic, legal, and social issues surrounding the use of information and access and use information ethically and legally

5. Personal Development
   An individual engaged in personal development strives for physical well-being and emotional maturity. Degree graduates will demonstrate the ability to:
   • Develop and/or refine personal wellness goals
   • Develop and/or enhance the knowledge, skills, and understanding to make informed academic, social, personal, career, and interpersonal decisions

6. Quantitative Reasoning
   A person who is competent in quantitative reasoning possesses the skills and knowledge necessary to apply the use of logic, numbers, and mathematics to deal effectively with common problems and issues. A person who is quantitatively literate can use numerical, geometric, and measurement data and concepts, mathematical skills, and principles of mathematical reasoning to draw logical conclusions and to make well-reasoned decisions. Degree graduates will demonstrate the ability to:
   • Use logical and mathematical reasoning within the context of various disciplines
   • Interpret and use mathematical formulas
   • Interpret mathematical models such as graphs, tables and schematics and draw inferences from them
   • Use graphical, symbolic, and numerical methods to analyze, organize, and interpret data
   • Estimate and consider answers to mathematical problems in order to determine reasonableness
   • Represent mathematical information numerically, symbolically, and visually, using graphs and charts

7. Scientific Reasoning
   A person who is competent in scientific reasoning adheres to a self-correcting system of inquiry (the scientific method) and relies on empirical evidence to describe, understand, predict, and control natural phenomena. Degree graduates will demonstrate the ability to:
   • Generate an empirically evidenced and logical argument
   • Distinguish a scientific argument from a non-scientific argument
   • Reason by deduction, induction and analogy
   • Distinguish between causal and correlational relationships
   • Recognize methods of inquiry that lead to scientific knowledge

**Developmental Education**

Developmental courses are offered to prepare individuals for admission to John Tyler Community College curricula. These courses are designed to assist the individual with the development of the basic skills and knowledge necessary in reading, writing and mathematics to succeed in academic programs.
TRANSFERRING TO OTHER INSTITUTIONS
Coursework in the A.A. and A.S. degree programs at John Tyler Community College will transfer to most four-year colleges and universities. Some four-year schools will accept certain A.A.S. degree programs in transfer, but this policy will vary by institution. Normally, courses in which students have earned grades below a “C” are not accepted at other institutions. The counseling staff is available to help students planning to transfer with gathering information and reviewing alternatives. Each student, however, is responsible for becoming acquainted with the course requirements for an intended major at a transfer institution and for planning a major at John Tyler that meets the four-year institution’s transfer requirements.

Guaranteed Articulation Agreements
Guaranteed articulation agreements allow John Tyler students who graduate with an associate degree and who meet specific criteria to seamlessly transfer to more than 35 four-year colleges. Information about these transfer agreements may be found at www.jtcc.edu/transfer. Students who have questions about the transferability of certain courses also may find the State Council of Higher Education for Virginia (SCHEV) Transfer Tool to be helpful. This tool provides information on the transferability of more than 60 commonly offered courses from the VCCS. A link to this tool may be found at www.jtcc.edu/transfer.

INSTRUCTIONAL TECHNOLOGY
The Instructional Technology Office collaborates with faculty members in the design, development, delivery, evaluation and revision of instruction. The responsibilities of the office include:
- Promoting the use of technology and best practices in enhancing teaching and learning
- Designing and facilitating professional development and training opportunities to support teaching and learning with technology
- Conducting one-on-one consultation services addressing the design and development of courses and technology integration planning
- Researching new methods, strategies and technologies that enhance achievement of student learning outcomes
- Providing technical support to faculty, staff and students using Blackboard, VCCS Gmail accounts and a variety of educational technologies

Distance Learning
Courses taught in non-traditional modes enable and support innovative learning options in a variety of settings including your home, office or anywhere you have internet access. These options are designed to increase educational access for students for whom work schedules, family responsibilities or other life demands restrict attendance at traditional on-campus classes.

John Tyler Community College offers the following types of distance learning courses:
- Online Courses: All coursework and interactions with the instructor and classmates are completed online, either synchronously (at the same time) or asynchronously (on your own time). There is a requirement of two proctored activities. Proctored events can be completed at JTCC Testing Centers, testing sites at other VCCS colleges or at any approved site outside of the state of Virginia.

In addition JTCC offers access to ProctorU, an online proctoring service that allows students to complete computer-based exams in the comfort of their own home (or another location). A reliable internet connection, webcam and other technical requirements are needed. Students are observed by a live person who will establish a remote connection to the student’s machine to view computer activity. Students will also be observed through live video. The use of this tool is at the discretion of the instructor and may not be available in all courses.
- Hybrid: The instructional time is split between online and on-campus requirements. The number of on-campus sessions varies depending on the class requirements (labs, presentations, clinicals, internships, etc.). Online coursework may include synchronous (at the same time) and asynchronous (on your own time) activities and assignments.
- Videoconferencing Courses: Students meet at one of the JTCC campus sites, at another VCCS college site or at a connected off-campus site. Class meetings are scheduled just like traditional on-campus classes. The instructor is connected to the class by a video network. Students see and hear the instructor and students at other sites via monitors, screens and speakers in the classroom. Microphones and cameras in all locations allow everyone to interact. Additional instruction may be in Blackboard or other sources.

Students enrolling in online or hybrid courses need constant, reliable internet access and should know how to use the internet and e-mail. Online courses and the online portion of hybrid courses are accessed through Blackboard.

Blackboard is an online course management system that provides web space for course information such as announcements, syllabi, course documents, lectures, and other materials specifically related to individual courses. Students have access to Blackboard via the myTyler single sign-on. Consider enrolling in the free, five-day introduction to online and hybrid learning. Learn more by visiting http://bit.ly/jtcc-online. Instructors have until the first day of class to make the Blackboard course available for students.

Students can locate tutorials on how to navigate Blackboard
on the JTCC web site or by clicking on the Help and Support button in the course menu of every course. Students may also download free antivirus software and locate student computing discounts in the Blackboard system. Students may receive assistance during business hours with Blackboard or their student Gmail accounts by filling out this help request form: http://www.jtcc.edu/bbemailhelp.

Students should refer to the course schedule for specific information about online, hybrid, and videoconference course sections before registering. Online courses may be searched in the schedule by selecting “Virtual” in the “Locations” field at www.jtcc.edu/schedule.

GREAT EXPECTATIONS PROGRAM
The Great Expectations Program helps foster youth gain access to a community college education and transition successfully from the foster care system to living independently. Individuals eligible for the program include foster youth between the ages of 17 and 24 who are or were affiliated with the Virginia Foster Care System, youth adopted after the age of 13, or special needs adoptions. The program provides assistance with the financial aid process, monitoring of academic progress and assistance with accessing college support services, and an assigned mentor who will provide one-on-one academic and career-focused support. To learn more about the Great Expectations Program, go to www.jtcc.edu/greatexpectations or contact the Great Expectations coach at Midlothian (804-594-1507) and Chester (804-706-5206).

THE ON-RAMP PROGRAM
Targets displaced adult workers who are unemployed with the goal of increasing the number of adults who obtain a college credential or industry-recognized certification or licensure. Assists students with financial aid, skills assessment, and career planning.

PARTNERSHIP TO ENSURE EDUCATIONAL REFORM (PEER)
The Partnership to Ensure Educational Reform (PEER) Consortium, comprising education, government, business and industry, collaborates to build career pathways or programs of study that begin in secondary school and continue through an associate or baccalaureate degree, a journey-worker’s license, a postsecondary-level industry certification or state licensure. Features include college credit earned during high school through dual and concurrent enrollment, industry certifications and assessments, early college placement testing, work-based learning experience, and support services for students. The Consortium provides professional development for educators as well as markets college and career preparation.

INTERNATIONAL EDUCATION PROGRAM
John Tyler Community College is committed to internationalizing its curriculum through a broad range of opportunities for faculty, staff and students in order to develop a community of global learners. These substantive learning opportunities prepare students for possible international employment, for international study and for personal enrichment.

The College has a multifaceted international education program aimed at developing global awareness. The basic approaches include international travel presentations at the College; teacher-teacher exchanges; college-partnership exchanges, which focus on combined student, faculty and administrator site visits; study-abroad activities; and international-travel groups comprised of all constituents of the College community.

WORKFORCE DEVELOPMENT
John Tyler Community College and the VCCS believe that a competent workforce is the main ingredient in ensuring a competitive economic future for the Commonwealth. A skilled workforce is the competitive edge in the high performance, global economy faced by the state and the nation. Workforce development programs and services provided by the College must be at the heart of Virginia’s job strategy for the 21st century. The College is committed to the development and delivery of programs and services that prepare the emerging workforce and retool the existing workforce.

Workforce development at John Tyler Community College is integral to all programs as its credit and noncredit students learn and demonstrate the skills for the present and future workplace. Business and industry representatives serve on advisory councils to John Tyler Community College in many areas of workforce development and program requirements. The College has implemented and continuously expands the array of business and industry training programs, partnerships and services to be flexible and responsive to industry demands.

These specialized and tailored programs and services are supported through the Community College Workforce Alliance (CCWA) and through academic programs and course offerings. CCWA offers classes at three convenient locations throughout the region.

COMMUNITY COLLEGE WORKFORCE ALLIANCE
A comprehensive workforce development entity, CCWA was created in 2003 as a partnership between John Tyler Community College and J. Sargeant Reynolds Community College. It merged the workforce development operations of both institutions into one unit, providing the Richmond metropolitan, Tri-Cities and Gateway Virginia region with a single point of contact for workforce services. CCWA optimizes the training programs, consulting services and instructional talents of both institutions, thus providing its clients with the best workforce development in the area.

CCWA has a combined workforce development service area that includes four cities (Colonial Heights, Hopewell, Petersburg and Richmond) and 12 counties (Amelia, Charles City, Chesterfield, Dinwiddie, Goochland, Hanover, Henrico, Louisa, Powhatan, Prince George, Surry and Sussex). Annually, CCWA serves approximately 1,200 employers and provides skills training to approximately 15,000 individuals. For more information, please visit the CCWA web site (www.ccwatraining.org). CCWA can be reached at 804-523-CCWA (523-2292).
ECONOMIC DEVELOPMENT
The College and CCWA work closely with state, regional and local economic development organizations to advise and assist new or expanding companies and respond to their start-up and long-term training requirements. The College will provide a Rapid Workforce Response Team to meet the demand and urgency of the region’s industry. Both John Tyler Community College and CCWA will honor and respect a company’s request for nondisclosure and the safeguarding of proprietary information.

Ongoing Business and Industry Seminars
CCWA schedules open-enrollment seminars for business and industry in many areas such as computer software applications, networking, engineering design software, engineering manufacturing processes, quality improvement, ISO 9000, QS 9000, ISO 14000, finance, communication skills, employee development, management and supervision, and safety and OSHA. CCWA trains more than 10,000 employees annually in one- or two-day seminars and provides privately tailored training contracts.

Tailored Training Programs
CCWA provides tailored noncredit programs unique to specific industry requirements on campus or at the workplace. Tailored credit programs are available through John Tyler Community College’s Department of Career Pathways. An industry or government agency requesting assistance from the College can select the best combination of programs and services, credit or noncredit, to meet its specific needs.

Job Fairs
In cooperation with a given company and/or the Virginia Employment Commission, CCWA coordinates and conducts job fairs for new or expanding companies.

WorkKeys®
Community College Workforce Alliance is a certified WorkKeys® assessment center and can provide WorkKeys® job profiling and basic skill-level assessment in eight areas (applied mathematics, applied technology, observation, listening and/or writing, locating information, reading for information and teamwork). Many companies have added WorkKeys® as a highly effective tool in their hiring and training programs.

Assessment Testing
In addition to WorkKeys®, the College will test applicants using standardized tests or specialized tests prescribed by the hiring company.

Pre-Employment Training
Working closely with the Virginia Department of Business Assistance, John Tyler Community College develops and conducts pre-employment training programs for new or expanding companies.

Apprenticeship and Student Apprenticeship Training
The College and CCWA offer both adult and student apprenticeship training programs. The College designed and implemented the model student apprenticeship program for the Commonwealth and effectively implemented it on campus and in area secondary school systems. CCWA works closely with companies and school systems to design full or student apprenticeship programs to meet company and student needs.

Consulting Support to Industry
The College and CCWA work with area industries to understand their ongoing training and consulting requirements. CCWA uses industry trainers, experienced managers, consultants and technicians to provide up-to-date concepts, assistance and training development support and advice to the region’s industry.

Customer Service Academy
CCWA offers training in customer service skills through a modularized program called the Customer Service Academy. Companies can choose to focus on a single area of concern or schedule employees to participate in the entire curriculum as a way of addressing this most critical workforce skill area. Modules include communications, managing job stress, exceeding customer expectations, and more.

Information Technology
CCWA offers an array of Information Technology (IT) career tracks in areas such as Oracle DBA, Cisco CCNA, A+ and more, as well as the entire array of Microsoft Office programs.

Tractor Trailer Driving School
CCWA, through a partnership with U.S. Truck Driving, offers at the Chester Campus a commercial tractor trailer driving school for full-time and part-time students who want to earn their CDL (Commercial Drivers License).

ADMISSION INFORMATION
Eligibility
Any person who has a high school diploma from an accredited high school or the equivalent certificate (GED), or who is at least 18 years of age and able to benefit from instruction at John Tyler Community College, may be admitted to the College. John Tyler Community College reserves the right to evaluate and document special cases and to refuse admission if the College determines that the applicant is a threat or a potential danger to the College community or if such refusal is considered to be in the best interest of the College. (High school students and home-schooled students interested in admission at the institution should refer to the subsequent sections addressing the enrollment of these populations.)

Out of State Compliance Policy
At present, the College does not accept applications for
registration in online courses for applicants or students currently residing in:
District of Columbia
Iowa
Maryland
Massachusetts
Missouri
New Mexico
Utah
Wyoming
The College is not authorized to conduct business in the above-mentioned states. Applicants or students who enroll in online courses while residing in these states may be disenrolled and refunded their tuition. Students may contact the State Council of Higher Education for Virginia (SCHEV) at 804-225-2600 or communications@schev.edu for information related to state agency contacts for complaint resolution.

APPLICATION AND ADMISSION TO THE COLLEGE

New Students
All students planning to take courses at John Tyler Community College must apply for admission. Whenever possible, individuals are encouraged to apply online at www.jtcc.edu. The College does not charge an application fee. Please direct all inquiries concerning applications to the Admissions and Records office at either the Chester Campus or the Midlothian Campus, or e-mail admissionsandrecords@jtcc.edu.

Returning Students
Returning students who have not been enrolled in credit courses at the College during the past three years must reapply by resubmitting an application for admission prior to registration. Please direct all inquiries concerning applications to the Admissions and Records office at either campus. Students who applied but never attended are required to reapply after three semesters.

Declaring a Major
(Curriculum Placement for Degree and Certificate Students)
General admission to the College does not constitute admission to degree and certificate programs. Curriculum placement is required in order to graduate from John Tyler Community College and to receive financial aid. To be admitted into an academic program, students must:
1. Satisfy placement testing requirements, by taking placement tests at the College or by submitting satisfactory SAT or ACT test scores or proof of satisfactory completion of English and math at the college level.
2. Provide the College with official copies of transcripts from high school and all colleges and universities previously attended only if any of the following are applicable:
   a. Student is applying for Funeral Services, Emergency Medical Services, or Nursing;
   b. Student has been suspended or dismissed from another college or university; and/or
   c. Student is requesting a transcript review for transfer credits from a College outside the VCCS.
3. Meet with a counselor to be placed in an academic program.

Admission to Individual Courses
(Non-curricular Students)
Students may enroll in courses when the prerequisites (including placement tests for the courses) have been met. Prerequisites are part of the course information at www.jtcc.edu/schedule. Not all courses have prerequisites.

Admission Priorities
When enrollment must be limited for any curriculum, first priority must be given to all qualified students who are residents of the political subdivisions supporting John Tyler Community College, provided such students apply for admission to the program in a reasonable length of time prior to registration. The priority list is as follows:
1. Residents of the political subdivisions supporting the College;
2. Other Virginia residents; and

SPECIAL ADMISSION PROCEDURES

Transfer Students
Transfer students should submit an Application for Admission and have transcripts from all previous institutions attended sent to the Admissions and Records office if they plan to request transfer credit or if required by their program of study. Some programs do not require transcript submission. Usually a transfer student who is eligible to re-enroll at the last college of attendance will be eligible for admission to John Tyler Community College. If a transfer student is academically ineligible to return to the previous college, the student must appeal for admission to John Tyler Community College by submitting a letter to the dean of students at least four weeks prior to the desired semester of admission.
An official evaluation of transfer courses will be completed by the John Tyler Community College director/registrar or assistant director/assistant registrar of Admissions and Records if the student is curriculum placed, enrolls and completes a Transfer Credit Request Form. Generally, credit will be given for courses in which a grade of “C” or better was received and which are equivalent to courses in the curriculum at the College. Courses in the areas of natural sciences, mathematics, accounting, administrative support technology, advertising and marketing that were completed more than ten years ago are not awarded transfer credit. Courses in the areas of information technology and computer science that were completed more than five years ago are not awarded transfer credit. Division deans who are responsible for students’ curricula may make exceptions to these restrictions. Generally, transfer credits are awarded only if the credits have been earned at an institution which is accredited by one of the six nationally recognized regional accrediting agencies in the United States. Transfer credits may be awarded from non-regionally accredited institutions with the approval of the appropriate academic dean. Students requesting transfer credits from non-regionally accredited institutions must
submit course syllabi and course descriptions for review by the appropriate academic dean. Upon the approval of the dean, transfer credits will be awarded consistent with JTCC policies addressing the acceptance of transfer credits from regionally accredited institutions. John Tyler Community College also normally awards transfer credits for courses completed at accredited foreign institutions. Students transferring from foreign institutions should contact the Admissions and Records office at either the Chester Campus or the Midlothian Campus for additional information.

**Dual Enrollment of High School Students**

Dual enrollment courses allow a student to be enrolled in, and get credit for, a college course and a high school course simultaneously. The courses are taught at the college level by instructors who meet the academic requirements to teach a college course and are offered at the high school following the high school schedule. The tuition and book costs are generally paid by the school system.

Dual enrollment is primarily for high school juniors and seniors, and all students must meet College admissions criteria. Because admitting freshmen and sophomores is considered exceptional, the college-ready status of each prospective freshman and sophomore student will be treated on a case-by-case basis. Formal approval from the College is required for admitting freshmen and sophomores. All individuals admitted as dual enrollment students must demonstrate readiness for college by achieving satisfactory scores on college placement tests or by meeting other entrance standards as set by the College.

Dual enrollment courses are offered at many high schools in John Tyler Community College’s service area and provide an excellent opportunity for high school students to get a head start on college. For additional information about dual enrollment, contact the Department of Career Pathways at dualenrollment@jtcc.edu.

**Enrollment of Students under the Age of 18 - Concurrent Enrollment**

Individuals 18 years of age and younger who have not completed high school may seek to enroll at John Tyler Community College. They must satisfy the admission requirements expected of all students, including the completion of placement tests, as well as provide the institution with letters of permission to enroll from their principals or designees, as well as letters from their parents or guardians. Students under the age of 17 and their parents are required to meet with the dean of students (or the dean’s designee) prior to submitting applications for admission.

Concurrent enrollment is primarily for high school juniors and seniors. Because admitting freshmen and sophomores is considered exceptional, the college-ready status of each prospective freshman and sophomore student will be treated on a case-by-case basis. Formal approval from the dean of students, as designee of the college president, is required for admitting freshmen and sophomores. All individuals admitted as concurrent enrollment students must demonstrate readiness for college by achieving satisfactory scores on college placement tests or by meeting other entrance standards as set by the College.

An individual who has completed home schooling and certifies that he or she has the equivalent of a high school diploma may apply and enroll at the institution in the same manner as a high school graduate or recipient of a GED.

**International Students**

John Tyler Community College does not admit international students possessing F-1 (student) visas. Other visa holders will be considered for admission in accordance with institutional policies and procedures and the guidelines of the U.S. Citizenship and Immigration Services (USCIS).

All visa holders seeking admission must present copies of their I-94, applications of admission and other required information to the Admissions and Records office at least 45 days prior to the beginning of the semester in which they wish to enroll. International students whose native language is other than English must take the College's English placement test.

JTCC reserves the right to accept or reject credit recommendations that are noted on foreign credential evaluations.

**Senior Citizens – Citizens 60 Years of Age or Older**

Senior citizens are encouraged to take advantage of free tuition provided for by the Senior Citizens Higher Education Act of 1974. Senior citizens, who are Virginia residents and who had a taxable individual income not exceeding $15,000 for Virginia income tax purposes for the year preceding enrollment, may register for credit courses on a tuition-free basis. All senior citizens, regardless of income, may audit credit courses and take some non-credit courses free of charge. Senior citizens waiving tuition can enroll on the first day of
their selected class only if there is space available. Those who wish to reserve space in any credit or noncredit class can register and pay as regular students. However, senior citizens will not be allowed to pay for a course to secure a space with the intention of dropping and re-enrolling using the tuition waiver. Students who are auditing courses and who wish to drop or withdraw before the deadlines must appear in person or e-mail admissionsandrecords@jtcc.edu to make the request. Students cannot drop or withdraw from audited courses online. Additional information about special enrollment opportunities for senior citizens may be obtained from the Admissions and Records office.

**Admission of Suspended and Dismissed Students**

Students who have been academically suspended from John Tyler Community College may re-enroll after serving a one-semester suspension. Students who have been academically suspended from any other institution of higher education may enroll after submitting their transcript or a copy of their letter of suspension to the Counseling Center. Academically dismissed students from John Tyler or any other institution, may petition the Academic Status Committee by submitting their request for exception to this policy to the dean of students. All petitions must be submitted in writing at least four weeks prior to the first day of classes for the semester in which admission is sought. Students dismissed for disciplinary reasons may petition the Threat Assessment Team by submitting their requests to the dean of students requesting exceptions to this policy. All petitions must be submitted in writing at least four weeks prior to the first day of classes for the semester in which admission is sought.

**Sex Offender and Crimes Against Minors Registry Admissions Policy**

Section 23-2:2:1 of the Code of Virginia requires that the VCCS send enrollment information to the Virginia State Police concerning applicants to institutions of higher education. This information is transmitted electronically and compared against the Virginia Criminal Information Network and National Crime Information Center Convicted Sex Offender and Crimes Against Minors Registry.

If the College receives notification, the following procedures apply:

A. The College’s Threat Assessment Team (TAT) shall be notified and consider the applicant or student’s enrollment for a determination of whether he/she is a threat to the campus community or danger to themselves, other students, faculty or staff (i.e., campus community). The Dean of Students reserves the right to suspend the individual or withhold the application on an interim basis while TAT considers the case.

B. Before a recommendation is made by the TAT to the Dean of Students, the TAT will notify the applicant or student in writing that they will be afforded an opportunity to appear in person before TAT or present relevant information in writing regarding their sex offender or crimes against minors status for consideration of whether he/she is a threat or danger to the campus community. Upon receipt of such notice, the applicant or student shall have five (5) business days to contact the Dean of Students Office and arrange a meeting to appear before TAT or provide a written response. At a minimum, the applicant or student shall provide the following information:

1. Disclosure of the nature of the offense for which he/she has been convicted;
2. Justification for consideration of admissions/ reinstatement;

If the applicant or student does not respond within the requested timeframe, the Dean of Students Office shall inform him/her that TAT will proceed.

C. The TAT shall make a determination of whether a threat or danger exists and recommend to the Dean of Students whether to deny admission or revoke enrollment.

D. The Dean of Students Office shall notify the applicant or student in writing of the TAT’s recommendation and afford him/her with an opportunity to respond in writing within five (5) business days.

E. The Dean of Students Office shall forward the TAT recommendation and any response(s) received from the applicant or student to the vice president of learning and student success (or designee) who may consult with TAT and shall issue a final decision in writing regarding admission or enrollment.

F. The College will provide the campus community through its catalog or web site information on how to access the Sex Offender and Crimes Against Minors Registry consistent with state and federal law.

**Placement Testing**

Placement tests generally are required for all entering students seeking admission to degree and certificate programs, as well as some career studies certificate programs (see the listings of majors in this catalog for specific placement testing requirements). John Tyler Community College administers the Virginia Placement Tests (VPT) in English and mathematics. Students who fail to demonstrate required competencies or specific prerequisite skills on placement tests will be required to take the appropriate developmental classes prior to enrolling in college-level courses. Concurrent/home-schooled students planning to take transfer courses must test into ENG 111 and MTE 1, while those planning to take non-transfer courses must test into ENF 1 and MTE 1. Developmental classes are not, however, available to concurrent/home-schooled students. Concurrent students who provide official evidence of a satisfactory mathematics score of 52 on the PSAT, a mathematics score of 520 on the SAT or a mathematics score of 22 on the ACT, taken within the last two (2) years, are exempt from taking the VCCS mathematics placement test. Concurrent students who provide official evidence of a minimum score of 50 on both the reading and writing sections of the PSAT, 500 on both the critical reading and writing sections of the SAT, or a minimum score of 18 on both the English Test and Reading Test of the ACT, taken within the last two (2) years, are exempt from taking the VCCS English placement test. Students should submit applications of admission prior to taking placement tests. John Tyler Community College placement tests are
administered by Testing Services. E-mail testing@jtcc.edu or call 804-594-1555.

Math placement test scores are valid for two (2) years after the date of the test. Math classes taken outside of JTCC that are older than 10 years old cannot be used for placement purposes without prior approval from the Division of Mathematics, Natural and Health Sciences. Students who have successfully passed MTH2/3/4 (the formerly used developmental math courses) more than 5 years ago are strongly encouraged to take the VPT and use those scores for placement.

Students who take the placement test and who do not enroll in developmental math are allowed to take one (1) retest within twelve (12) months. Students who attempt developmental mathematics will be ineligible for a retest. Exceptions to this retest policy may be made on a case-by-case basis.

A student who provides official evidence of a satisfactory mathematics score of 520 on the SAT or a mathematics score of 22 on the ACT taken within the last two years is considered to have credit for Modules 1-9 and is not required to take any of our developmental math courses.

English test scores are valid for two (2) years after the date of the test. Students who take the English placement test and who do not enroll in developmental English are allowed to take one (1) retest within twelve (12) months. Students who attempt a developmental English course will be ineligible for a retest. Exceptions to this retest policy may be made on a case-by-case basis in accordance with established college procedures. A student who provides official evidence of a minimum score of 500 on both the critical reading and writing sections of the SAT, or a minimum score of 18 on both the English Test and Reading Test of the ACT, taken within the last two (2) years, is exempt from taking the VCCS English placement test.

Exceptions to mandatory placement testing in English (writing and reading) will only be made for:

1. A student who has completed a college-level English course at an accredited institution with a grade of “D” or better.
2. Students with bachelor degrees are not required to take the English placement test.

Exceptions to mandatory placement testing in mathematics:

1. All entering students must take or provide mathematics placement tests prior to enrolling in MTH 103-104, MTH 115-116, MTH 120, MTH 158, MTH 163-164, MTH 170, MTH 173-174, MTH 240, MTH 241-242, MTH 270 or MTH 273-274. A student who has completed a college-level mathematics course at an accredited institution with a grade of “D” or better may enroll in the subsequent math course. Students who have not completed a math course within the last year are strongly encouraged to meet with a math advisor and/or take the VPT to ensure readiness for the subsequent course.

2. Students with bachelor degrees are not required to take the math placement test, but it is recommended that students take the VPT math placement test to assess their current skill-level before registering for a college-level math class.

Ability-to-Benefit Academically
Persons 18 years of age and older who do not have high school diplomas or the equivalents may be admitted if they can benefit from college study as demonstrated by placing at the ENF 1 or higher level on the VPT English Test and the Module 1 or higher level on the VPT Mathematics Test. Such students are not eligible for federal financial assistance.

ACADEMIC ADVISING AND CLASS REGISTRATION

Advising
The John Tyler Community College advising system is a collaborative and ongoing developmental process between the student and advising personnel to enhance success in the college experience. Students are (1) assisted in developing educational plans consistent with their life goals and objectives; (2) provided accurate information about institutional policies, procedures, resources, and programs; (3) assisted in considering their life goals by relating their interests, skills, abilities, and values to careers, the world of work, and the nature and purpose of higher education; and (4) assisted in evaluating or reevaluating their progress toward established goals and educational plans. Students who are admitted to degree and certificate programs are assigned faculty advisors. Members of counseling services advise non-curricular students and students new to the College.

Registration
Registration, the last step in the enrollment process, involves reserving a space in the class(es) selected and paying tuition. Information on the dates and location of registration is listed online at www.jtcc.edu. Allowance is made for late registration, but normally a student may not enter a new course after the first week of the class. Students who have outstanding financial obligations from previous semesters with the John Tyler Community College Business Office, Bookstore or Library or have outstanding financial obligations for parking violations or owe any college within the Virginia Community College System the amount of equal to or above $500 are not permitted to register for classes until their accounts have been paid in full.

CHANGE IN REGISTRATION

Adding or Dropping a Course
Schedule changes may be made during the add/drop period of the semester in session. A student may not enter a new class after the add/drop period without approval from the appropriate division office.
**Withdrawing from a Course**

Withdrawal from a course without academic penalty may be made within the first 60 percent of the course. The student will receive a grade of “W” for withdrawal. After that time, the student will receive the grade earned at the end of the course. 

(In the case of mitigating circumstances documented by the instructor and approved by the dean, a grade of “W” may be awarded.) 

Administrative withdrawals may be initiated by an instructor in the event of excessive absences on the part of the student. Students should refer to the course outline. In addition, an instructor may recommend withdrawal if it is believed a student is experiencing undue academic difficulty. Students cannot withdraw via their myTyler account. Students on financial aid are strongly encouraged to meet with a financial aid counselor before withdrawing from any class, as it may result in significant financial burden on the student. Students are responsible to understand the consequences intended or not for withdrawing. Students are responsible for reviewing final course grades in their myTyler account at the end of the academic term. Per VCCS policy, the college may not expunge a students course enrollment after the last day to drop with a refund.

**Academic Load**

The minimum full-time course load is 12 credits per semester. The maximum full-time load is 18 credits in the fall and spring and 13 credits in the summer. Students wishing to carry an academic load of more than the maximum load ordinarily should have a minimum grade point average of 3.5 and the approval of the vice president of learning and student success or designee.

**Repeating a Course**

Normally, a student is limited to two enrollments in the same credit course. Requests to enroll in the same credit course more than twice must be submitted to the vice president of learning and student success or designee. A student, who enrolls more than twice without prior approval, may be deleted from the class roll. This policy does not apply to repeat enrollments in seminars and topics courses.

**ACADEMIC INFORMATION AND POLICIES**

**Assessment Activities**

John Tyler Community College engages in continuous study of its internal and external environment through a number of assessment activities. Students are required to participate in these activities for the purposes of program evaluation and improvement. All candidates for graduation are required to participate in the institution’s assessment of its academic programs prior to graduation. Failure to complete required assessment activities may result in transcripts and/or diplomas being withheld until this requirement is fulfilled.

**Auditing a Course**

A student desiring to attend a class without receiving credit for the course may do so by registering to audit that class. A student who is auditing a course is subject to all of the attendance requirements of the class. Although recommended, per VCCS policy, auditing students do not have to meet course prerequisites. The instructor of such a course is required to provide a student auditing the course with the same level of instructional services as students who are enrolled for credit. Only by the mutual consent of both the student and the instructor may the attendance and academic requirements of the class be modified for the auditing student. For students not meeting a prerequisite for the audited course the faculty member is not expected to teach material that should have been attained in an earlier class.

Permission of the appropriate academic dean or designee is required to audit a course. After receiving the dean’s written permission, a student desiring to audit a class must register in person and pay the applicable tuition. Audited courses carry no credit and do not count as part of a student’s course load.

A student desiring to change status in a class from audit to credit must do so within the add/drop period for the course. A change from credit to audit must be made by the last day of the drop/add period. Financial aid students should consult with the Financial Aid office before changing their status from credit to audit. Students enrolled in an SSDL course must follow Northern Virginia Community College audit rules.

Students who are auditing a course must appear in person or send an e-mail to the admissionsandrecords@jtcc.edu e-mail account should they wish to drop or withdraw before the deadlines. Students will receive error messages and cannot drop or withdraw from an audit course via myTyler portal.

**Credits**

Each semester hour of credit given for a course is based on approximately one academic hour (50 minutes) weekly for 16 weeks of formalized, structured instructional time (lectures, out-of-class study, laboratory and shop study, or combinations thereof).

**Alternative Forms of Credit and Advanced Standing**

Students may seek advancement by (1) transferring credits earned at other accredited colleges or universities; (2) receiving credit for courses and training completed in the military, criminal justice academies, technology certification programs and health services certification programs; (3) taking and achieving acceptable scores on standardized tests and examinations, including the ETS Advanced Placement Examinations, CLEP, DANDES and the International Baccalaureate; (4) submitting documentation for life experiences deemed equivalent to college courses; and (5) passing locally designed and administered tests (credit-by-examination). To be eligible to apply for advanced credit, a student must be admitted to the College and officially placed in a curriculum and enrolled.

Students who wish to request credit for life experiences must register for SDV 198 (Portfolio Development). Only 25% of the credits that are accepted can be used toward any curriculum at JRTC. Students who are interested in credit-by-examination should contact the appropriate academic division dean. The credit-by-examination fee is $75.00 per class. Students who believe that their previous educational studies,
training programs or work experiences may be equivalent to the content of college courses should contact their faculty advisors, the Counseling Center or the Student Success Center. Only credit-by-exam courses administered by JTCC can be used to satisfy course requirements. Credit-by-exam courses from other institutions are not transferable.

**Grading System**
The quality of performance in any academic course is reported by a letter grade, the assignment of which is the responsibility of the instructor. The following grade options are applicable only in the case of college credit courses:

- **A** Excellent. 4 quality points per credit.
- **B** Good. 3 quality points per credit.
- **C** Average. 2 quality points per credit.
- **D** Poor. 1 quality point per credit.
- **F** Failure. 0 quality points per credit.
- **I** Incomplete. No credit. An incomplete grade may be given when a student has been unable to complete a course because of an emergency situation. The time and condition of removal of the grade is a matter of contract between the student and the instructor. Generally, a grade of “I” will not be awarded unless a majority of the coursework has been satisfactorily completed and the remainder of the work can be completed within the following semester.
- **P** No grade point credit/noncredit courses. This is used in orientation and specialized courses and seminars at the discretion of John Tyler Community College.
- **W** Grade assigned when a withdrawal form is received in the Admissions and Records office during the first 60 percent of the course. (After this period of time, a “W” may be assigned by an instructor with the approval of the dean if there are mitigating circumstances; documentation must be placed in the student’s academic file.)
- **X** Audit. No credit.
- **XY** Senior Citizen/No Credit.

The following grade options are applicable only in the case of developmental courses:

- **R** Re-enroll. The student made satisfactory progress but did not complete all of the course objectives. The student must re-enroll to meet the course objectives.
- **S** No grade point credit. This is used only for satisfactory computation of the Developmental Studies Courses (numbered 1–9).
- **U** Unsatisfactory. The student did not make satisfactory progress in the course. The grade of W, as described above, also applies.

**Waiver of Course Requirements**
Students may petition their academic advisor and division dean for the waiver of required courses in the curriculum. If required courses are waived, other courses must be substituted in the official program to meet the specified credit-hour requirement. Veterans may be approved to waive the physical education courses upon presentation of the DD214 discharge form.

**Attendance**
While individual instructor policies may vary somewhat, punctual and regular attendance is expected. Check your course syllabus for your instructor’s attendance policy. Instructors are required to submit Never Attended Forms on or before the census date of each session if a student has never attended their course. Attendance policy plays no role in submitting a Never Attended Form. When absence from a class becomes necessary, it is the responsibility of the student to inform the instructor prior to the absence whenever possible. The student is responsible for the subsequent completion of all study missed during an absence. Frequent absences may result in administrative withdrawal from a class and the termination or reduction of veterans’ benefits and other programs of financial assistance.

**Grade Reports**
Reports of final grades are available to students online at the end of each semester via the myTyler portal. Students are responsible for viewing their grades at the end of each term. The grade point average (GPA) for the semester is determined by dividing the total number of credits attempted for the semester into the total number of quality points earned for the semester. The cumulative grade point average is determined by dividing the total number of credits attempted at John Tyler Community College into the total number of quality points earned at John Tyler Community College. Courses for which R, P, S and U grades are awarded (courses numbered 1–9) are not totaled as credits attempted and are not computed in the grade point averages. If there is reason to believe that a grade is incorrect, the instructor should be contacted as soon as possible.

**Student Records and Academic Transcripts**
The Admissions and Records office is the repository of all student academic records. Records are retained in accordance with VCCS policy. An academic transcript is the official and permanent record of a student’s academic history. John Tyler Community College permanently retains each student’s academic transcript.

Students may request official copies of their transcripts either online, in person or by mail. Online requests are made at www.parchment.com. Parchment charges a fee of $3.00 for each transcript sent electronically and $5.00 for each transcript sent via the U.S. Postal Service. In person and mail-in requests are handled by the Admissions and Records Office at a charge of $3.00 per transcript. Transcripts are mailed within 7 business days of the receipt of the request.

Unofficial transcripts are not available online to students who have not attended John Tyler within the past three years. Students who have outstanding financial obligations from previous semesters with the John Tyler Community College Business Office, Bookstore or Library or have outstanding financial obligations for parking violations are not permitted to register for classes or obtain transcripts until their accounts have been paid in full.
Credit for Repeated Courses
In computing GPA, only the most recent grade is used if the course has been repeated. All previous attempts are denoted with the message "Repeated Course" on the student's transcripts and are removed from the GPA calculation that is reflected in the current cumulative GPA. Four-year institutions and programs requiring admission at John Tyler, such as Nursing and Funeral Services, may use all courses completed as part of the selection criteria.

Academic Renewal
Students returning to John Tyler Community College after an absence of a minimum of five years may wish to take advantage of academic renewal in order to improve their cumulative GPAs. To be eligible, a student must be currently enrolled at the College, have a period of at least five years (60 months) between enrollments, and have earned a minimum GPA of 2.5 in the first 12 college-level credits (or more) after returning to John Tyler. If approved, all grades of "D" or "F" earned prior to returning to the College will not be factored into the cumulative GPA calculation, but course(s) and grades will remain listed on the transcript. For additional information about academic renewal, please contact the Admissions and Records office.

Correction of Education Records
Students have the right to have records corrected that they believe are inaccurate, misleading or in violation of their privacy rights. Contact the Admissions and Records office for information on the procedures for correction of records.

Directory Information
All student records are protected under the 1974 Family Educational Rights and Privacy Act (FERPA), as amended. FERPA does allow institutions to release, without prior consent from the student, information which is considered "directory" information. The Virginia Community College System has defined student directory information as a student's name, electronic mail address, address, telephone numbers, semesters of attendance, full- or part-time status, date of admission, date of expected or actual graduation, major, freshman or sophomore classification, and any degrees, honors, and awards received. It is the student's responsibility to notify the Admissions and Records office in writing if this information is not to be released. Currently enrolled students will be required to sign a waiver if they plan to participate in College activities. Questions regarding FERPA should be directed to the director/registrar or assistant director/registrar of Admissions and Records.

ACADEMIC HONORS
Honors List
A student who has completed 24 college credit hours at John Tyler Community College and has achieved a cumulative grade point average of 3.5 will be placed on the honors list.

Dean's List
A full-time student (12 or more college credits, exclusive of developmental credits) who achieves a semester grade point average of 3.2 or higher will be placed on the dean's list.

Graduation Honors
Students who have earned a minimum of 30 credit hours or 50 percent of the degree/certificate requirement at John Tyler Community College are eligible for graduation honors as follows, given the GPAs provided:
- 3.8 Summa Cum Laude
- 3.5 Magna Cum Laude
- 3.2 Cum Laude

ACADEMIC STANDING
Good Standing
A student is considered to be "in good standing" if he/she maintains a minimum GPA of 2.0 each semester, is eligible to re-enroll at John Tyler Community College, and is not on academic suspension or dismissal status. A student on academic warning or academic probation, who is eligible to re-enroll, may be considered eligible to receive financial aid assistance or other benefits requiring a "good" academic standing status.

Academic Warning
Students who fail to attain a minimum GPA of 2.0 for any semester shall be placed on academic warning. Students on academic warning should be encouraged to consult with their advisor/counselor and take advantage of academic support services provided by the College.

Academic Probation
Students who fail to maintain a cumulative GPA of 1.50 shall be on academic probation until such time as their cumulative average is 1.75 or better. The statement "Academic Probation" shall be placed on their permanent records. Students on probation are ineligible for appointive or elective office in student organizations unless special permission is granted by the dean of students or another appropriate college administrator. Students are notified via their VCCS e-mail accounts when placed on probation. Instructions on how to seek removal of the negative service indicator placed on the account to prevent further enrollment is provided within the e-mail. Students may be required to carry less than a normal load the following semester and are required to consult with their advisor/counselor. Students shall be placed on probation only after they have attempted 12 semester credits.

Academic Suspension
Students on academic probation who fail to attain a semester GPA of 1.50 or better shall be placed on suspension only after they have attempted 24 semester credits. Academic suspension shall be for one semester. The statement "Academic Suspension" shall be placed on students’ permanent records. Students who are placed on academic suspension and wish to appeal should follow the appeal process established by the College. Suspended students may be reinstated at the conclusion of the suspension period by following the process established by the College. Students who have been reinstated from academic suspension must achieve a 2.0
GPA for the semester of their reinstatement and must earn at least a 1.75 GPA in each subsequent semester of attendance. The statement “Subject to Dismissal” shall be placed on the students’ permanent records. Students who have been reinstated from academic suspension will remain subject to dismissal until their cumulative GPA is raised to a minimum of 1.75. Reinstated students may be required to carry less than a normal course load the following semester and are required to consult with their advisor/counselor. Colleges are encouraged to make additional academic support available to students who have been reinstated following academic suspension.

**Academic Dismissal**

Students who do not attain at least a 2.0 GPA for the semester of reinstatement following academic suspension shall be academically dismissed. Students who achieve at least a 2.0 GPA for the semester of their reinstatement following academic suspension must earn at least a 1.75 GPA in each subsequent semester of enrollment. Failure to attain a 1.75 GPA in each subsequent semester until the cumulative GPA reaches 1.75 shall result in academic dismissal. The statement “Academic Dismissal” shall be placed on students’ permanent records. Academic dismissal is normally permanent. In exceptional circumstances, students may appeal and be reinstated following processes established by the College. Students who have been reinstated after academic dismissal will remain subject to dismissal until their cumulative GPA is raised to a minimum of 1.75. Reinstated students may be required to carry less than a normal course load the following semester and are required to consult with their advisor/counselor. Colleges are encouraged to make additional academic support available to students who have been reinstated following academic dismissal.

**Satisfactory Progress**

Students pursuing any credit programs are cautioned that, although an average between 1.50 and 1.99 may not result in formal academic probation, a minimum of 2.0 in their curriculum is a prerequisite to the receipt of an associate degree, diploma or certificate.

**TUITION AND FEES**

**Tuition Rates and Fees**

Tuition rates are established by the State Board for Community Colleges and are subject to change. Current tuition rates can be obtained at www.jtcc.edu/tuition.

The e-Rate is applicable to designated distance-learning courses delivered entirely over the Internet. Tuition rates include a $8.50 per credit hour technology fee. Virginia residents are exempt from the $18.00 per credit hour capital fee. The contract rate is for students who do not qualify for in-state tuition rates and are enrolled in classes provided in a contract between their employers and John Tyler Community College where the employer agrees to pay the students’ tuition directly to the College. In addition to tuition, students or employers must pay a mandatory comprehensive fee of $35.00 per semester. Student fees are approved by the John Tyler Community College Board and are subject to change.

During general registration, all tuition and fees are due by 5:00 p.m. on the Friday of the week in which a student registers. Tuition and fees may be paid by cash, money order, personal check, MasterCard or Visa. If a student’s check is returned to the College for any reason, the student will be charged a $35.00 returned check fee in addition to the amount of the returned check. The student has ten days from the date of notice in which to redeem the check and pay both the amount of the check and the returned check fee. After that, the returned check fee will increase to $50.00, and the student will be withdrawn from his/her classes. This obligation must be paid with cash, cashier’s check, debit card or credit card (MasterCard or Visa). Failure to fulfill this financial obligation within the specified time shall result in the student being withdrawn from John Tyler Community College and being referred to a collection agency and to the Commonwealth of Virginia’s Debt-Setoff Program.

**Eligibility and Application Procedure for In-State Tuition**

Generally, to be eligible for in-state tuition rates, the student must have been legally domiciled in Virginia for a period of at least one full year prior to the planned semester of enrollment. Domicile is a technical legal term that means more than simple “residency” in Virginia. An individual seeking eligibility for in-state tuition must demonstrate the intention of remaining in Virginia indefinitely. Demonstration of intent is usually accomplished through objective evidence such as a Virginia driver’s license, voter’s registration, and payment of Virginia income taxes, although additional forms of documentation may be required. Students requesting a change of domicile status must furnish supporting documentation and secure approval by no later than the first day of their first semester of enrollment. Requests for a change of domicile presented after the established deadline will be considered for the subsequent semester.

Active duty military members, along with their spouses and dependents, may receive in-state tuition benefits as long as they have been assigned to a permanent duty station in the Commonwealth of Virginia. In order to secure the benefit, a copy of current permanent orders, valid military ID and proof of address must be presented prior to the start of the first semester of enrollment. The one-year residency provision is waived in this instance and continued eligibility for the in-state benefit is guaranteed provided that the student maintains continuous enrollment.

Any individual who can show proof of past military service may be eligible for one year (3 semesters) of in-state rates. The State of Virginia allows veterans to receive in-state tuition rates with appropriate documentation. Contact the Admissions and Records office at admissionsandrecords@jtcc.edu for more information.

For information about qualifying for in-state tuition under Section 702 of the Veterans Choice Act see page 22.

**Residency**

A student under the age of 24 generally assumes the domiciliary status of the parent(s) unless one of the following
changing tuition eligibility status from out-of-state to in-state

An out-of-state student who has resided for one full year in Virginia may request a change of domicile status through the Admissions and Records office. Supporting documentation that presents clear evidence of domiciliary intent, such as a Virginia driver’s license, voter’s registration and payment of Virginia income taxes, must be presented by no later than the first day of the next semester of enrollment. Students who request a change of domicile and present documentation beyond the first day of class will be considered for the subsequent semester. The burden is assumed by the applicant to provide as much information and documentation as appropriate to demonstrate intent.

In the event that a student’s circumstances change after a semester has begun, the student’s tuition status may be eligible for reclassification. This reclassification shall be effective for the next academic semester or term following the date of the application for reclassification. Students should follow the institution’s domicile appeal policy.

Eligibility for Financial Aid

To qualify for financial aid and to maintain their eligibility, students must:

1. Complete the Free Application for Federal Student Aid (FAFSA) by the July 2 or November 3 dates (see the previous section);
2. Be accepted for admission to John Tyler Community College as a degree- or certificate-seeking student;
3. Be enrolled in good standing and maintain satisfactory progress;
4. Be citizens, eligible non-citizens or permanent residents of the United States or its trust territories;
5. Not be in default on a Federal Stafford Loan, PLUS, SLS or a Perkins Loan;
6. Not owe an overpayment on financial aid received at any institution of higher learning; and
7. Have a high school diploma, a GED or the ability to benefit.

Finance assistance

John Tyler Community College attempts to ensure that qualified students are not denied an education because of a lack of money. All students are encouraged to apply for financial assistance by submitting the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. Students are urged to submit their financial aid applications well in advance of their anticipated registration dates. The dates for applying for financial aid for the fall semester are May 15 (Priority) and July 2 (Guaranteed). The dates for applying for financial aid for the spring semester are September 15 (Priority) and November 3 (Guaranteed). The priority date for the summer semester is March 15. Students can apply after these dates but must be prepared to pay out-of-pocket for their tuition and fees and be reimbursed if they are eligible for aid approximately a month-and-a-half after the semester has begun.

All financial aid-related notifications will be communicated to students through their John Tyler Community College (JTCC) e-mail. It is important that students monitor their JTCC e-mail and myTyler accounts on a regular basis for the most up-to-date financial aid notifications.
Students receiving financial aid are responsible for notifying the Admissions and Records office regarding any change in name, address, telephone number or marital status.

**STUDENT FINANCIAL AID PROGRAMS AVAILABLE**

**Federal Pell Grant**
The Federal Pell Grant is an award for undergraduates only with no prior bachelor's or professional degree. Eligibility is primarily based on the Expected Family Contribution (EFC) but is also affected by enrollment status. The EFC must be $198 or less. The maximum award for the 2015-2016 academic year is $5,775, with a minimum of $626. A minimum of 12 credit hours each semester is required to receive full eligibility, with pro-rated awards going to students with less than 12 hours.

**FSEOG (Federal Supplemental Educational Opportunity Grant)**
FSEOG is for undergraduate Federal Pell Grant recipients with exceptional financial need (i.e., students with the lowest EFCs). Students may receive up to $2,000 a year depending on eligibility and funding level. Priority is given to out-of-state students whose tuition charges are significantly higher.

**On-Ramp Program**
The On-Ramp Program, supported by Workforce Investment Act (WIA) Rapid Response Funds, provides financial assistance to students seeking postsecondary education credentials, such as a college degree or an industry-recognized certification, state licensure or other portable workforce credentials. Designed to help those who are unemployed improve their chances of job hunting success, this program also requires participants to complete a series of workshops that focus on the various skills needed during the job-search process. Students can learn more about this program and eligibility requirements at www.jtcc.edu/onramp or by contacting John Tyler Community College’s On-Ramp Program coordinator. The program coordinator will explain the program details, will complete an intake application, and will determine if students are eligible for the program.

**FWS (Federal Work-Study)**
Federal Work-Study is a program that provides part-time employment opportunities to eligible students to help meet the costs of post-secondary education. Based on the results of the Free Application for Federal Student Aid (FAFSA), eligible students are awarded an allotment that may be earned through part-time employment in FWS-approved positions either on or off campus. The program is designed to provide students with an opportunity for employment arranged around class schedules.

**COMA (Commonwealth Grant)**
COMA is a state-funded grant that provides assistance to undergraduate Virginia residents to a maximum of tuition and fees per academic year. A minimum of 6 credit hours is required each semester in order to receive COMA.

**PTAP (Part-time Tuition Assistance Program)**
PTAP is a state-funded grant that provides assistance to undergraduate Virginia residents to a maximum of tuition and fees per academic year. A minimum of 1 credit hour and a maximum of 6 credit hours are required each semester in order to receive PTAP.

**VCCS (Virginia Community College System)**
**Tuition Grant**
VCCS is a state-funded grant that provides assistance to undergraduate Virginia residents who demonstrate financial need. Award amounts vary according to funding levels; however, awards will not exceed charges for tuition, fees and books.

**Federal Stafford and PLUS Loan Program**
The Federal Stafford and PLUS Loan Program enables students and/or parents to borrow directly from the Federal Department of Education. The loan is guaranteed by the federal government. Students may apply online at www.jtcc.edu/loans.

**Virginia War Orphans/Dependents of Firefighters and Police Officers Education Benefits**
Sections SB-529 and SB-626 of the Code of Virginia provide for free tuition to attend state-supported institutions of higher education for children of persons killed in the line of duty to the Commonwealth of Virginia or deceased, disabled, imprisoned, or missing in action as a result of any armed conflict after December 6, 1941, involving the U.S. armed forces. Individuals entitled to this benefit may utilize it to pursue any vocational, technical, undergraduate or graduate program of instruction. Generally, programs listed in the academic catalogs of state-supported institutions are acceptable provided they have a clearly defined educational objective. Applications should be submitted at least four months before the expected date of matriculation.

**MILITARY AND VETERANS EDUCATION**
The Military and Veteran Education Office assists eligible active duty service members, reservists, veterans and military family members with their applications and reporting requirements necessary for establishing and maintaining Veterans Administration (VA) educational entitlements.

Most curricula and programs of education offered at John Tyler Community College are approved by the Virginia Department of Education for VA entitlements. Eligible beneficiaries are reminded that only those courses that apply to their approved programs of education may be certified for VA educational entitlements. Students are expected to present their
The following individuals shall be charged a rate of tuition not to exceed the in-state rate for tuition and fees:

- A Veteran using educational assistance under either Chapter 30 (Montgomery GI Bill – Active Duty Program) or Chapter 33 (Post-9/11 GI Bill), of Title 38, United States Code, who lives in the Commonwealth of Virginia while attending John Tyler Community College (regardless of his/her formal state of residence) and enrolls in the school within three years of discharge or release from a period of active duty service of 90 days or more.

- Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in the Commonwealth of Virginia while attending the College (regardless of his/her formal state of residence) and enrolls in the school within three years of the transferor’s discharge or release from a period of active duty service of 90 days or more.

- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in the Commonwealth of Virginia while attending the College (regardless of his/her formal state of residence) and enrolls in the College within three years of the service member’s death in the line of duty following a period of active duty service of 90 days or more.

- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge, release, or death described above and must be using educational benefits under either Chapter 30 or Chapter 33, of title 38, United States Code.

### Satisfactory Academic Progress

To receive any federal or state aid, a student must maintain satisfactory academic progress (SAP). The Financial Aid office will evaluate a student’s progress at the time of application and at the end of each semester. Changes of curricula do not necessarily constitute extended time limits for eligibility. Per federal regulation, all enrollments at John Tyler Community College and all applicable transfer credits will be considered, whether or not aid was awarded or received. The Satisfactory Academic Progress Policy is subject to change. For more detailed information about our SAP Policy, please visit www.jtcc.edu/financialaid.

The College’s current criteria for satisfactory academic progress are:

- Students must successfully complete at least 67% of the credit hours they attempt. All courses attempted at John Tyler Community College and accepted transfer credits will be counted.

- Students must meet minimum cumulative grade point average requirements based on a progressive scale. Only non-remedial courses with grades of A, B, C, D and F are included in this calculation. Transfer credits are excluded. In order to graduate, a minimum cumulative grade point average of 2.0 is required.

<table>
<thead>
<tr>
<th>Credit Hours Attempted</th>
<th>Minimum Required GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 15</td>
<td>1.50</td>
</tr>
<tr>
<td>16 - 30</td>
<td>1.75</td>
</tr>
<tr>
<td>31+</td>
<td>2.00</td>
</tr>
</tbody>
</table>

- Please note that only courses with grades of A, B, C, D and F are included in the GPA evaluation.

- Students who have attempted a number of credits that total 150% or more of their program requirements have not made satisfactory academic progress. All enrollment periods and acceptable transfer credits are counted, even semesters when aid was not received. Developmental courses are not included in this calculation.

Students may appeal the loss of their aid, in writing, to the Financial Aid office prior to the beginning of each term. Only appeals which document mitigating circumstances will be considered.

### SCHOLARSHIPS

The John Tyler Community College Foundation relies on the generosity of the community to continue its work in securing the future of the College, its students, its faculty and its staff. Since most of the College’s graduates live and work in the area,
Applying for Graduation
To be considered for graduation, a student must:

1. Obtain an Application for Graduation from the student’s academic advisor or Student Success Center advisor.
2. Be officially in the major (curriculum or career plan) for which he or she is seeking graduation. A student may only be in one major (curriculum or career plan) at a time.
3. Request his or her advisor or Student Success Center advisor to attach an advising transcript to the Application for Graduation.
4. Complete all designated sections of the Application for Graduation.

5. Submit the completed Application for Graduation to the Admissions and Records office by the appropriate deadline to receive an audit report:

   - For summer semester candidates: February 15
   - For fall semester candidates: June 15
   - For spring semester candidates: September 15

NOTE: Applications for graduation are generally due on the same dates each semester. However, if the due date falls on a weekend, the deadline will shift to the previous Friday. Please see the Graduation Deadlines and FAQs page at www.jtcc.edu/services/graduation/graduation-deadlines-and-faqs/ for this academic year’s specific deadlines.

NOTE: Applications for Graduation for spring semester candidates will be accepted until early February, but no official graduation audit reports advising candidates of outstanding course requirements will be forwarded to students who submit graduation applications after September 15. See the Graduation Deadlines and FAQs page at www.jtcc.edu/services/graduation/graduation-deadlines-and-faqs/ for more information on audit reports.

6. Ensure that all course waiver and substitution forms are submitted by his or her advisor and dean to the Admissions and Records office by the appropriate deadline:

   - For summer semester candidates: June 15
   - For fall semester candidates: November 1
   - For spring semester candidates: March 1

NOTE: Course waiver and substitution forms submitted after this date will be processed for summer semester. If you submit your form late, you will not be processed for spring semester graduation and will not be permitted to participate in commencement until the following year.

7. Participate in the institution’s assessments of its academic programs prior to graduation. Information will be sent to students outlining specific information about the process. Failure to complete required assessment activities may result in transcripts and/or diplomas being withheld until this requirement is fulfilled.

Multiple Awards

- Students seeking to graduate with two degrees and/or certificates must submit graduation applications for both awards.
• Current State Council of Higher Education for Virginia (SCHEV) procedures limit the number of awards (degrees and certificates) that can be officially reported by VCCS institutions for a student within an academic year (summer, fall, spring) to no more than two.
• Students may only graduate with one specialization within a single degree.
• All subsequent awards (degrees, certificates, career studies certificates) must differ from prior awards by at least 25 percent.

Participating in Commencement
• John Tyler Community College’s annual Commencement Ceremony is held each May. Students who graduate in the preceding summer, fall and spring semesters may participate.
• Students who wish to participate in the annual Commencement Ceremony must indicate on their graduation applications that they intend to participate in the ceremony, and submit a R.S.V.P. via e-mail. There are no exceptions to this requirement.
• Information about the Commencement Ceremony and the purchase of caps, gowns and announcements is mailed to all participants in the spring semester.

Diplomas
• The Admissions and Records office will notify graduates when their diplomas are ready for distribution. Candidates should make certain that their mailing addresses are accurate at the institution. Students who require official verification of their graduation should request official transcripts three-to-four weeks after their graduation date.
• All graduation honors reflect all coursework attempted at John Tyler Community College. This includes courses that may not be used in satisfying specific graduation requirements.
• To be eligible for academic honors (summa cum laude, magna cum laude, cum laude), students must complete at least 50 percent of the courses used to satisfy the requirements of their degrees and/or certificates at John Tyler Community College.

COUNSELING
Professional counselors and academic/career advisors are available at both campuses to assist students with educational decisions, career planning and other concerns. If students require assistance beyond the scope of the services of counselors, referrals to other qualified professionals or agencies will be offered. Counseling is committed to helping students and prospective students learn how to develop career and life plans and to deal effectively with career and life transitions. Since there is no single correct way for everyone to deal with such decisions, a variety of developmental services and programs are offered, including assistance with personal development, academic development and career development. These programs are designed to help students learn how to make better career and life planning decisions, refine study skills necessary for college success, assist with college transfer, and build leadership skills.

SAILS (STUDENT ASSISTANCE AND INTERVENTION FOR LEARNING SUCCESS)
SAILS is a required VCCS early alert system that allows faculty and staff to identify students who are at risk of not succeeding academically by raising flags, as well as recognize students’ academic success or improvement by raising kudos. Students are informed of the flags and kudos raised by instructors via e-mail, phone, and postcards. During interventions, students are encouraged to use the campus resources available to assist them with their learning success. Flag raisers are apprised of the outcomes of interventions.

CAREER DEVELOPMENT SERVICES
Students seeking assistance with career development should contact the career and internship coordinator at asorensen@jtcc.edu. With the assistance of counselors, students can take a number of assessment instruments, access career and college search systems, explore current job listings and refine their job-seeking skills. Counseling personnel also present special programs about interviewing and résumé writing.

STUDENT SUCCESS CENTERS/TUTORING
Students can receive free tutoring services in many of the courses offered by the institution in the Student Success Centers located in room M209 on the Chester Campus and room E208 on the Midlothian Campus. In addition, students can receive assistance with test-taking skills and study skills. The College also has a math lab and a writing center on each campus.

STUDENT ACTIVITIES
The Student Activities Office (www.jtcc.edu/studentactivities) provides a variety of educational, cultural, and social experiences for students, faculty, staff and members of the community. Student activities and organizations are open to all interested students. Students may seek leadership opportunities through participation in the John Tyler Community College Student Council (See By-Laws). Students who are interested in participating in any aspect of the student activities program or who wish additional information on events and organizations should e-mail studentactivities@jtcc.edu.

Social and Cultural Programs
The Student Activities office provides a variety of educational, cultural, and social experiences for students, faculty, staff and members of the community. The Office of Student Activities sponsors annual welcome picnics, movie nights and a variety of volunteer projects. The College also sponsors Black History Month festivities, an International Food Festival and provides support to the Literary Festival.

Student Clubs and Organizations
The Office of Student Activities offers a diverse selection of student clubs and organizations. The College encourages the formation of new student groups. Support for the development of new student groups and continued support of existing organizations is provided by the Office of Student Activities. More than 30 student organizations are currently
recognized by the College and the Office of Student Activities. Recognized student groups are divided into seven categories: Educational and Departmental Organizations, Honorary Organizations, Professional Organizations, Religious Organizations, Special Interest Organizations, and Recreational Organizations. Educational and Departmental Organizations: Art Club, Chemistry Club, History Club, Human Services Club, Theatre Club, Philosophy Club, Film Club and Environmental Science Club. Honorary Organizations: Phi Theta Kappa – Tau Rho Chapter (Chester), Phi Theta Kappa – Beta Omicron Omicron (Midlothian). Professional Organizations: Funeral Services Student Association, Future Teachers Club, Health Career Club, JTCC American Welding Society and the Student Nurses’ Association. Religious Organizations: Disciples of Christ. Special Interest Organizations: Book Ends, College Republicans, Creative Writing Club, Gay Straight Alliance, Origami Club, Latin American Culture Club, Rotaract Club, Single Parent Club, Students Above the Prime, and Student Veteran’s Organization. Recreational Organizations: JTCC Soccer Club and JTCC Running Club. Student Government: JTCC Student Council Student activities and organizations are open to all interested students. Students who are interested in participating in any aspect of the student activities program or who would like additional information on organizations should e-mail studentactivities@jtcc.edu. Student Council By-Laws Adopted Fall 1995 Amended Fall 2012 Amended Fall 2013 Preamble The purpose of the Student Council of John Tyler Community College shall be to further the best interests of the students of the College by providing the College administration and faculty with recommendations addressing student issues and concerns, the development and promotion of student activities, and matters concerning the betterment of student life at the institution. Through participation in Student Council, students are provided with input and a voice in the collective governance of the College. Article I Membership and Organization Section 1. The Student Council shall consist of one representative from all official student clubs and organizations. Representatives are expected to attend all officially scheduled Student Council meetings. Section 2. Each student club and organization also will identify an alternate representative who will attend Student Council meetings in the event that the designated representative is unable to attend. Section 3. Representatives and alternates from student clubs and organizations will be identified annually by all official student clubs and organizations. The names of club representatives and alternates will be forwarded to the coordinator of student activities. Section 4. All representatives and alternates must be enrolled in at least six semester credits of course work and have minimum cumulative grade point averages of 2.0. Article II Duties and Responsibilities Section 1. The members of the Student Council will elect a president, vice president, and secretary from its members at a time and place determined by the coordinator of student activities. All elections will be by secret ballot. Section 2. The duties and responsibilities of the president shall be: to preside over all Student Council meetings; to represent the Student Council at specific College activities when requested by the College president, vice presidents or dean of students; to serve on Student Council committees; and to attend special meetings and events when requested by members of the College administration. Section 3. The duties and responsibilities of the vice president shall be: to preside over Student Council meetings when the president is absent; to attend all Student Council meetings; to serve on Student Council committees when requested by the Student Council president; and to attend special meetings and events when requested by members of the College administration. Section 4. The duties and responsibilities of the secretary shall be: to take minutes at all Student Council meetings; to distribute draft minutes to all Student Council members for review and corrections; to present minutes to the cabinet for comment and formal approval; to distribute approved minutes to the coordinator of student activities; to maintain a roster of Student Council members; to maintain a record of attendance at Student Council meetings; to serve on Student Council committees when requested by the Student Council president; and to attend special meetings and events when requested by members of the College administration. Section 5. Student Council Cabinet may make recommendations regarding the development and nature of student activity programming and forward such recommendations to the coordinator of student activities. Section 6. Student Council may make suggestions concerning the general welfare of students and student life at the institution and forward such suggestions to coordinator of student activities. Section 7. Student Council members will participate in the coordination and presentation of student activities programming when requested by the coordinator of student activities. Section 8. Student Council may create student committees to assist with specific student activities and events, specifying the membership and responsibilities of these committees. Section 9. Student Council will establish policies and procedures addressing the conduct of its meetings, member attendance, and frequency of meetings.
Article III
Removal from Student Council
Section 1. A Student Council member shall be removed from office if he or she fails to adhere to Student Council attendance procedures; is placed on academic probation or suspension; withdraws from the College or does not register for classes (exception—enrollment is not required during the summer term); or fails to register for or maintain the required academic load and grade point average.

Section 2. If the president of the Student Council is removed from office as a result of the policies in Article I, Section 4, the vice president shall assume the position of president.

Section 3. If any member of the cabinet other than the president must relinquish office prior to the expiration of his/her term of office, the Student Council shall by majority vote select a qualified student to fill the existing vacancy.

Article IV
Advisors and Institutional Contacts
Section 1. The coordinator of student activities shall be the advisor of the Student Council.
Section 2. The dean of students, the coordinator of student activities, and the vice president for student affairs may attend all Student Council and committee meetings and participate in all discussions.

Article V
Amendments
The Student Council bylaws may be amended by a 2/3 vote of the members of the council or by the vice president for student affairs. Any amendments or revisions of the bylaws shall be effective upon the approval of coordinator of student activities and the vice president for student affairs.

STUDENTS WITH DISABILITIES
John Tyler Community College has an institutional commitment to serving students with disabilities and to assisting those students in pursuit of their education beyond high school.

To support this commitment:
- The College has designated a counselor as a disabilities support services specialist at each campus.
- The College's campuses and physical environment are fully accessible.

Support services available:
- Accommodations on placement testing
- Instructional accommodation plans
- Consultation services for faculty and staff
- Assistance with registration
- Career counseling
- Instructional support services as required, such as:
  - Note-taking support
  - Use of alternate tests
  - Electronic readers
  - Testing accommodations
  - Approval to record lectures
  - Tutors
  - Additional time on tests
  - Other approved services as needed

Differences between high school and college
As students make the transition from high school to college, it is important to recognize the significant differences between the two education levels.

By law, public high schools guarantee all students an education until age 21. Schools are required to screen and evaluate students who may have a disability. An Individual Education Plan (IEP) shall be developed for any student identified as having a disability, and schools shall provide appropriate fundamental services and accommodations to meet that student's needs.

While they are not guaranteed an education at a college, students cannot be discriminated against. Colleges are not obligated to screen or evaluate students for possible disabilities. Students are responsible for providing documentation to the College's disability support specialists, and the college shall provide "reasonable accommodations" to students with disabilities.

Taking a lead role
Self-advocacy is key for any student entering college. Students are encouraged to articulate their needs. Doing so will help students gain confidence, assist them in taking responsibility for their college choices, and help them realistically plan for their futures. Family members can help with the transition by offering support and encouragement.

The student's obligations
A student with a disability has an obligation to:
- Identify that she/he has a disability;
- Identify the need for accommodations;
- Provide documentation of the disability; and
- Utilize support services and accommodations in college.

The College's obligation
Under Section 504 and the Americans with Disabilities Act, the College has an obligation to provide reasonable accommodations in order to afford the student an equal opportunity to participate in the college's programs, courses and activities.

STUDENT CONDUCT (STUDENT RIGHTS AND RESPONSIBILITIES) AND JUDICIAL AFFAIRS
The submission of an application for admission to John Tyler Community College represents a voluntary decision to participate in the programs and courses offered by the institution according to the policies, rules and regulations of the College and the State Board for Community Colleges. The College's approval of the application represents the extension of a privilege to join the JTCC community and to remain a part of it so long as the student meets required academic and behavioral standards. Each student is guaranteed
the privilege of exercising his or her rights without fear of prejudice. Conduct by any student that adversely affects the JTCC community’s pursuit of its educational objectives or represents a threat to its students, faculty or staff will result in disciplinary action.

Student Rights
Each student is guaranteed the privilege of exercising his or her rights without fear of prejudice. Such rights include the following:

• Students are free to pursue their educational goals.
  Appropriate opportunities for learning in the classroom and on the campus are provided by the College through the curricula offered.

• Free inquiries, expressions and assemblies are guaranteed to all students provided such actions do not interfere with the rights of others or the effective operation of the institution.

• Academic evaluation of student performance shall be neither arbitrary nor capricious.

• Each student will be informed at the beginning of each course as to how the instructor will arrive at the grade for the class. This should be in writing and included in the written outline or syllabus of the course. The student’s final grade should be based on total performance for the semester.

Student Responsibilities

• To know and adhere to the regulations, policies and procedures of the institution addressing academics and student behavior.

• To respect the rights of others to freely express their views and opinions.

• To accept responsibility for the consequences of one’s actions.

• To afford appropriate respect to faculty, staff and administrators in the performance of their duties and responsibilities.

• To practice academic integrity in all academic undertakings, avoiding all forms of academic dishonesty, including cheating, plagiarism and furnishing false information.

COLLEGE LIBRARIES
The library welcomes all John Tyler students on campus and online. Libraries on both campuses have computers for student use, laptops and tablets for use in the library, study tables, and comfortable seating. Wi-fi is available.

The library web site is the students’ gateway to the digital and print resources necessary for their coursework, and library staff are glad to assist students with their assignments. A technology staff member is available in each campus library to assist students with tech problems.

The Chester Campus Library is on the second floor of Moyar Hall. The Midlothian Campus Library is on the second floor of Hamel Hall.

The Library schedule is the same during fall and spring semesters:

Monday – Thursday: 7:30 a.m. – 9:00 p.m.
Friday: 7:30 a.m. – 5:00 p.m.
Saturday: 10:00 a.m. – 2:00 p.m.

During the summer semester, the library schedule is:
Monday – Thursday: 8:00 a.m. – 8:00 p.m.
Friday: 8:00 a.m. – 5:00 p.m.
Saturday: 10:00 a.m. – 2:00 p.m.

Hours vary during breaks and holiday periods. Any changes are posted on the web site. The libraries have approximately 50,000 books, DVDs and videos that can be accessed through the online catalog. More than 100 subscription databases are available for academic work. These products provide the full text of more than 10,000 magazines, journals, and newspapers. Students may access the subscription databases both on campus and off. All library computers have MS Office software. Ask a Librarian, 24/7 chat reference service, is available on the Library web site, http://library.jtcc.edu. Student conduct in the Library is governed by the policies stated elsewhere in this handbook. Computer use is in accordance with the VCCS Computer Ethics Policy, also in this Catalog and Student Handbook.

Library contact information:
Chester 804-706-5195
Midlothian 804-594-1519
library@jtcc.edu
http://library.jtcc.edu

TESTING SERVICES
The College operates Testing Centers on both the Chester and Midlothian campuses. At the centers, students are able to take various types of tests, including placement, proctored and College Level Examination Program (CLEP) tests. Placement tests are usually taken by students entering the College for the first time and by home-schooled/high school students wanting to enroll in concurrent and dual enrollment coursework. A select number of distance education tests are proctored in the College’s Testing Centers for students taking distance education courses at John Tyler, as well as other community colleges in Virginia.

Testing for Online/Internet Classes
The Testing Centers provide testing for students enrolled in online/internet classes. The Chester Testing Center is located in Trailer B and the Midlothian Testing Center is in Eliades Hall, room E117. The following guidelines apply to students who wish to take an internet test:

1. A student must present a photo ID and sign in to receive his/her test.
2. A student must furnish his/her own pencils and/or pens or anything else the instructor may allow.
3. All books, papers and other items are prohibited from the testing room unless specifically authorized by the instructor.
4. A student may not begin a test unless the optimum time permitted by the instructor for the test exists prior to the closing of the Testing Center.
5. All test materials, including scrap paper, will be collected following the administration of a test.
6. A student may NOT bring children to the Testing Center or leave them unsupervised outside the Testing Center.
7. Students must make an appointment for an online/internet test by completing an appointment request at https://apps.jtcc.edu/TestingServicesStudent/ including all information needed. Please note the following test center hours:

**Chester Testing Center (Trailer B)**
- Mondays: 8:00 a.m. – 5:30 p.m.
- Tuesdays: 8:00 a.m. – 5:30 p.m.
- Wednesdays: 8:00 a.m. – 5:30 p.m.
- Thursdays: 8:00 a.m. – 5:30 p.m.
- Fridays: 8:00 a.m. – 2:30 p.m.
- Saturdays: 8:00 a.m. – 2:30 p.m.

**Midlothian Testing Center (Eliades Hall, E117)**
- Mondays: 8:00 a.m. – 5:30 p.m.
- Tuesdays: 8:00 a.m. – 5:30 p.m.
- Wednesdays: 8:00 a.m. – 5:30 p.m.
- Thursdays: 8:00 a.m. – 5:30 p.m.
- Fridays: 8:00 a.m. – 2:30 p.m.
- Saturdays: 8:00 a.m. – 2:30 p.m.

(Times are subject to last-minute emergency changes.)

In addition JTCC offers access to ProctorU, an online proctoring service that allows students to complete computer-based exams in the comfort of their own home (or another location). A reliable internet connection, webcam and other technical requirements are needed. Students are observed by a live person who will establish a remote connection to the student’s machine to view computer activity. Students will also be observed through live video. The use of this tool is at the discretion of the instructor and may not be available in all courses.

**STUDENT INFORMATION CENTER**
The Information Center represents John Tyler Community College by providing communications and customer service and acting as a primary telephone contact for the College. The Information Center representatives are able to answer a wide range of questions about the College using various databases, web pages and printed documentation. The Information Center also serves as the help desk for students needing access to the Student Information System. The Information Center, located on the Chester Campus in the Admissions and Records office, provides services for both Chester and Midlothian campuses via telephone, e-mail, and the web. Hours of operation are Monday, 8:00 a.m. – 7:00 p.m. and Tuesday through Friday from 8:00 a.m. to 5:00 p.m. Calls are received from outside the College from callers using 804-796-4000. Those seeking assistance may also submit an online Help Request Form found online at www.jtcc.edu/mytylerhelp. For more about the Information Center, visit www.jtcc.edu/services/information-center.

**STUDENT CONDUCT**
Generally, College disciplinary action shall be limited to conduct which adversely affects the College community’s pursuit of its educational objectives. The following misconduct is subject to disciplinary action:

1. All forms of dishonesty, including cheating, plagiarism, knowingly furnishing false information to the College, forgery, alteration, or use of College documents or instruments of identification with intent to defraud.
2. Disruption or obstruction of teaching, research, administration, disciplinary proceedings or other College activities.
3. Physical, psychological and/or verbal abuse or the threat of such abuse of any person on College premises or at College activities. This includes hazing, sexual harassment and sexual assault. (See Title IX Policy)
4. Participating in or inciting a riot or an unauthorized or disorderly assembly.
5. Seizing, holding or damaging property or facilities of the College, or threatening to do so, or refusing to depart from any property or facilities of the College upon direction by College officials or other persons authorized by the president.
6. Use of alcoholic beverages, including the purchase, consumption, possession, or sale of such, except where specifically authorized within the regulations of the College.
7. Gambling or holding a raffle or lottery on the campus or at any College function without proper College and other necessary approval.
8. Possessing, using, selling or distributing any types of illegal drugs.
9. Possessing on College property or at any College activity any dangerous chemical or explosive elements or component parts thereof, or rifle, shotgun, pistol, revolver or other firearm or weapon not used for lawful College studies without an authorization by the president of the College.
10. Physically detaining or restraining other persons or removing such persons from places where they are authorized to remain or in any way obstructing the free movement of persons or vehicles on College premises or at College activities.
11. Littering, defacing, destroying or damaging property of the College or property under its jurisdiction or removing or using such property without authorization.
12. Willfully encouraging others to commit any of the acts that have been prohibited herein.
13. Violating any local, state or federal laws.
14. Violating any rule or regulation not contained within the official College publications but announced as
an administrative edict by a College official or other person authorized by the president.

15. Violation of College parking regulations.

16. Violation of College fire regulations, such as failure to comply with emergency evacuation procedures or tampering with fire protection apparatus.

17. Theft or attempted theft of College or personal property on College premises.

18. Unauthorized entry into or presence in any College building or facility.

19. Violation of College policy on demonstrations.

20. Violation of College policy on solicitation and sales.

ACADEMIC DISHONESTY

19.18.1 Purpose
To establish the College’s academic dishonesty policy and appeal procedures.

19.18.2 Policy
Academic Dishonesty Defined
Students are expected to conduct themselves in an honorable manner in all of their academic work. All forms of academic dishonesty are prohibited at John Tyler Community College. Cheating on quizzes, tests, and examinations, unauthorized cooperation between students, unauthorized help from others, plagiarism, and the unauthorized use of software, databases, or expert advice that is contrary to the instructions of the professor are acts of academic dishonesty. Nursing students should consult the Nursing Handbook for additional information pertaining to academic dishonesty.

Addressing Allegations of Academic Dishonesty
If a faculty member has reason to believe that a student has engaged in an act of academic dishonesty, the faculty member should make the student aware of his or her suspicion and do so in a manner and place that ensures the confidentiality of their conversation. Following this discussion, if the faculty member remains convinced of the student’s act of academic dishonesty, the faculty member must inform the student in confidence that the student is being found to have committed an act of academic dishonesty and specify the disciplinary action that is being administered. The faculty member must also inform the student that the dean of students will be notified.

Disciplinary Actions
Faculty members must administer one of the following disciplinary actions if a student is found to have committed an act of academic dishonesty:

1. A formal warning: A written statement to the student that he or she has committed an act of academic dishonesty that is prohibited at the institution and may result in more severe disciplinary action should the student be found to have engaged in any subsequent act of academic dishonesty.

2. A formal warning and the requirement that the student repeat or re-submit an equivalent quiz, test, examination, exercise or assignment in question. The identical quiz, test, examination, exercise or assignment will not be given.

3. A formal warning and the assignment of the grade of F (numeric grade of zero) on the quiz, test, examination, exercise, or assignment in question.

4. Assignment of the grade of F and removal from the course after the appeals process has been exhausted.

Reporting Acts of Academic Dishonesty to the Dean of Students
A faculty member must provide the dean of students and the academic dean with a written report of any disciplinary action taken in response to an act of academic dishonesty within seven (7) business days (a business day is defined as a Monday-Friday when the College is open) of the administration of disciplinary action. The report must include the name of the accused student, the course number and class section number, the student’s EMPLID, the nature of the offense, and the specific disciplinary action taken. The report must also include all supportive documentation.

Disciplinary Actions that May Be Taken by the Dean of Students
All reports of academic dishonesty will be reviewed by the dean of students. The dean of students may assign a disciplinary action including but not limited to: placing a letter of admonition in the student file, suspending the student from the institution for a period of time not to exceed one year, and/or dismissing the student from the College. The student will be notified by the dean of students in writing of any action within ten (10) business days. Any student suspended or dismissed will have a statement of the action included on the academic record. In addition, a student who is suspended or dismissed will be withdrawn from all coursework in which he or she is enrolled, after the appeals process has been exhausted, exclusive of the course in which an F may have been assigned as part of disciplinary action.

Appeals to the Committee on Academic Integrity
A student who has been found to have committed an act of academic dishonesty by a faculty member and/or has been suspended or dismissed from the institution by the dean of students may appeal the sanction(s) to the Committee on Academic Integrity within ten (10) business days of the imposition of the sanction by the faculty member or within ten (10) business days of the receipt of the formal notification by the dean. Students who appeal will be afforded the opportunity of a hearing.

The Committee on Academic Integrity
The Committee on Academic Integrity is appointed annually and consists of nine members of the faculty. The chair of the committee will select four members of the committee to join the chair in considering a specific appeal.

Appeals Hearings
A student who has made an appeal will receive a written or electronic notification from the chair of the Committee on
Academic Integrity of the time, place, and date of the hearing at least five (5) business days before the hearing. The student may elect not to appear at a hearing, but the hearing will be held in his or her absence. If a student elects not to appear at the hearing, the student may submit a signed statement to the committee chair at least 48 hours prior to the hearing. Hearings will be closed to the public.

No tape recorder or other recording devices may be present or utilized during the hearing. The student will be given an opportunity to speak at the hearing and to present witnesses on his or her behalf.

The student may be accompanied by another individual at the hearing, but this person may not participate in the hearing. If the student wishes to be accompanied by another individual at the hearing, a request must be submitted to the chair of the committee no less than 48 hours prior to the hearing. The faculty member and/or dean of students will be given an opportunity to speak at the hearing and to present witnesses.

The involved faculty member should cooperate with the committee in furtherance of the hearing, including, but not limited to, attendance at the hearing, responsive answers to questions at the hearing, and production of all supporting documentation, if so requested by the committee.

The committee may request the appearance of and question witnesses. The student may direct questions to such witnesses, the faculty member and the dean through the chair of the committee.

The faculty member may direct questions to the student, witnesses and the dean through the chair of the committee. The committee may affirm, reduce or dismiss the decision of the faculty member or the dean. The student will receive written notification of the committee’s decision from the dean of students within fifteen (15) business days of the conclusion of the hearing with a copy to the involved faculty member and the appropriate academic dean.

Appeals to the Vice President of Learning and Student Success
A student may appeal the decision of the Committee on Academic Integrity in writing to the vice president of learning and student success or designee within ten (10) business days of the receipt of the committee’s decision. The vice president or designee will review the entire academic dishonesty proceeding and provide the student with a written notification of the findings and decision within ten (10) business days of the receipt of the appeal. The decision of the vice president or designee is final.

Records of Academic Dishonesty Actions and Appeals
All records of academic dishonesty actions and appeals will remain confidential and will be maintained in the Office of the Dean of Students. Such information will not be available to unauthorized persons without the express written permission of the student, court subpoena or other exceptions made under the conditions specified in the Family Education Rights and Privacy Act of 1974, as amended.

STUDENT DISCIPLINARY POLICIES AND PROCEDURES

Disciplinary Procedures
Campus judicial affairs officers are responsible for the administration of disciplinary procedures at the Chester and Midlothian campuses, except in cases relating to Title IX or involving possible Title IX violations. Please see the Title IX policy for additional information. Allegations of violation of College policy are accepted for consideration only when the apparent infractions are observed on College property or other locations where the College provides services.

Infractions of federal, state or local laws occurring off campus shall be the concern of the civil authorities except when such actions (1) directly affect the health, safety or security of the College community; (2) affect the College’s pursuit of its educational purposes; or (3) occur as a direct result of a College-connected disruption. Reports of alleged student violations of published College regulations may be submitted by an individual to the dean of students within fifteen (15) business days of the infraction. The dean of students will assign a judicial affairs officer as appropriate.

When unruly or otherwise unacceptable behavior occurs in a classroom or laboratory, the instructor may immediately require the student who is responsible for the disruption to leave the classroom. It is the student’s responsibility to contact the instructor prior to the next scheduled class meeting. After discussing the problem with the student, the instructor must either permit the student to return to class or forward formal written disciplinary charges against the student to the dean of students.

When unruly or otherwise unacceptable behavior occurs in the College libraries, library personnel may require the student or students who are responsible for the disruption to identify themselves and leave the library. Such students must be reported to the dean of students and are prohibited from returning to the College libraries until the allegations have been adjudicated by a judicial affairs officer appointed by the dean of students.

Once charges have been forwarded to the campus judicial affairs officer, the student may attend class pending the campus judicial affairs officer’s review of the allegation. If the dean of students believes, however, that the student’s presence in class may infringe on the rights of others or pose a threat to the welfare of other students and the instructor, the dean of students may prohibit the student from returning to class until the allegations have been adjudicated.

The campus judicial affairs officer is responsible for interpreting alleged misconduct with regard to published regulations and for identifying specific charges that will be brought against the student(s) involved. The campus judicial affairs officer should respond or bring charges within ten (10) business days from receipt of a report of a violation.

Campus Judicial Affairs Officers
Campus judicial affairs officers for the Chester and Midlothian campuses are appointed annually by the dean of students, subject to the approval of the College president.
Disciplinary Probation: A student may be prohibited from participating in College extracurricular activities, using specified College facilities, or otherwise restricted in his or her movements while at the institution for a period of time not to exceed one year. A student who violates the provisions of his or her probation will be immediately dismissed from the institution.

4. Restitution: Reimbursement for damage to or misappropriation of property. This may take the form of appropriate service or other compensation.

5. Attendance and successful completion of a special student development tutorial addressing ethics and appropriate student behavior. (The failure to attend and successfully complete this tutorial will result in the assignment of another disciplinary action.)

6. Disciplinary suspension: Exclusion from attending the College as a student for a definite period of time not to exceed one academic year.

7. Disciplinary dismissal from the College: Termination of student status for an indefinite period. The conditions of the readmission, if any, will be stated in the order of dismissal.

8. Administrative withdrawal from a course in which the student was found to be threatening and/or disruptive.

A student, pending a hearing by the campus judicial affairs officer, may be suspended on an interim basis by the dean of students or designee or the vice president of learning and student success and barred from the College if his/her presence is deemed a danger to others or is likely to be disruptive to the normal educational activities of the College. The dean of students or vice president may seek guidance and input from the Threat Assessment Team. Nothing in these procedures should be construed to prevent the dean of students or vice president from taking such official steps as he/she deems necessary except that final action shall be in accordance with the above procedures. Before a student may be suspended, he or she will be informed of the reasons for the suspension and will be provided an opportunity to respond within five (5) business days, except in exigent circumstances, in which case the student will be given said opportunity as soon as possible as determined by the dean of students or vice president.

NOTE: The Threat Assessment Team (TAT) upon review of the judicial affairs investigation and other information available to the team may make a recommendation of the disciplinary action to be taken. In these cases the student will be notified in writing.

Threat Assessment Team

Purpose and Mission of the Threat Assessment Team

John Tyler is concerned about the safety, health and well-being of all of its students, faculty and staff. The College has policies regarding the well-being for all members of the John Tyler community, including policies which address activities disruptive to the mission of the College as well as any suicidal or self-injurious threats or behaviors.

In adherence to Virginia Code 23-9.2:10, JTCC has established a Threat Assessment Team (TAT), comprised of representatives of Student Services, law enforcement, Security Services, Human Resources and faculty with experience in counseling/mental health. The team meets on a regular basis under the leadership
of the dean of students and the security manager.

The TAT is charged with addressing all reported behavioral incidents that occur on a John Tyler campus; at an off-site location; or on an electronic site, including e-mail, blogs, and Blackboard postings. The TAT will ensure every referral is addressed.

The mission of the JTCC Threat Assessment Team is to facilitate a safe college community through a coordinated, systemic, collaborative, objective, unbiased, thoughtful, proactive approach with strong emphasis on prevention through identification of the potential threats, assessments of said threats, interventions, management and follow up of any and all situations that pose or are thought to pose potential threats to the safety and well-being of individuals on campus as well as to the College community.

Any recommendations made by the TAT are sent to the vice president of learning and student success or designee for a decision. This decision shall be final in these cases. The student will be notified in writing.

**Disciplinary Records**

All records of disciplinary action will remain confidential, will remain separate from the student’s academic record, will be maintained in the Office of the Dean of Students, and will not be available to unauthorized persons on campus or to any person off campus without the express written permission of the student involved. Exceptions will be made only under the conditions specified in the Family Education Rights and Privacy Act of 1974, as amended, and under a court order or subpoena.

**STUDENT GRIEVANCE POLICY AND PROCEDURE**

**Overview**

The grievance procedure applies to students who have complaints of unfair and/or unlawful treatment. A student is defined as any person enrolled full- or part-time in credit or non-credit courses at the College. A grievance is a complaint of unfair and/or unlawful treatment formally charged by a student against a College employee, in regard to the application of College rules, policies, procedures and regulations. If at all possible, a complaint should be resolved without initiating the formal grievance procedure.

Please note that it is generally beneficial to the student to discuss the problem with College personnel prior to filing a formal grievance. College personnel are available to advise students. Students should not hesitate to contact a faculty member, counselor or any other College staff person to discuss the problem.

**Procedure**

**Level 1**

A grievance should be raised and settled as quickly as possible. Within fifteen business days following either the event that gave rise to the grievance or within fifteen business days (a business day is defined as Monday-Friday when the College is open) of the time when the student reasonably should have gained knowledge of the issue, the College employee involved should be contacted by the student. An attempt should be made to resolve the complaint informally. The first step is for the student to meet with the College employee involved. If the matter cannot be resolved, the student may file a written grievance within ten business days following the verbal response from the College employee involved. The written grievance should be presented to the employee with a notification of the grievance being forwarded to the employee’s supervisor. The written grievance should contain the following: (a) a complete description of the complaint; (b) any supporting documents; and (c) the redress sought. An entire set of records should be assembled and maintained by the student. The person receiving the written grievance has ten business days to reply to the student in writing.

**Level 2**

If the student is not satisfied with the written response from the employee, he or she may appeal it to the appropriate supervisor within ten business days. The student should forward copies of all correspondence and relevant documents from Level 1, along with a cover letter, to the supervisor. The supervisor has ten business days to reach a decision and reply in writing to the student and the employee.

**Level 3**

If the student is not satisfied with the written response from Level 2, he or she may appeal to the appropriate vice president or designee. This appeal must be made within ten business days after the reply from Level 2. The student should forward copies of all correspondence and relevant documents from Levels 1 and 2, along with a cover letter, to the vice president or designee. The vice president or designee has ten business days to make a determination and reply in writing to the student and the employee.

**Level 4**

If the student is not satisfied with the vice president’s or designee’s response, he or she may appeal to the College president or designee within ten business days after the reply from Level 3. The student should forward copies of all correspondence from Levels 1, 2, and 3, along with a cover letter, to the president or designee. The president or designee will discuss the grievance with all concerned parties and make a decision regarding the issue within ten business days after receipt of the correspondence. Copies of the vice president’s or designee’s decision will be sent to the appropriate College employees at Levels 1 and 2 and to the president.

**General Guidelines**

1. The student filing a grievance may be accompanied by an advisor or representative of his/her choice at any level of the procedure.

2. Revision of the deadlines for filing appeals and providing written responses may be made. This may be necessary because of vacations, examinations, illnesses or other extenuating circumstances. If the deadlines are changed by either party, the respective employee should inform the student of the receipt of the grievance and give an estimated date of the final reply.
3. The only issues that can be reviewed on appeal are those asserted in the filing of the initial grievance. No new issues can be raised or heard during the appeal review process.

4. Copies of the vice president’s decision will be sent to the appropriate College employees at Levels 1 and 2 and to the president.

**STUDENT GRADE APPEAL POLICY**

**Overview**

This policy applies to a student who is enrolled in credit-class and believes that his or her final grade in a class was determined in an unfair, arbitrary or capricious manner. A student is defined as any person enrolled full- or part-time in credit courses at the College. This policy is not applicable to grades on individual tests, examinations, reports and other assignments prior to the posting of the final course grade.

A student may appeal a final class grade for allegations that (1) the methods or criteria for evaluating academic performance as stated in the class syllabus or as communicated by the instructor by e-mail or Blackboard announcement were not adhered to in determining the final grade; (2) the instructor applied grading criteria unfairly or arbitrarily; and/or (3) that the instructor so exceeded his or her discretion in evaluating academic performance in the class as to be found unreasonable by the instructor’s peers at John Tyler Community College.

**Procedure**

**Level 1**

A grade appeal should be raised and settled as quickly as possible. Within fifteen business days following the posting of the grade in the Student Information System (SIS), the student must contact the instructor via e-mail and request an appointment to discuss his or her concerns regarding the final course grade. (A business day is defined as a Monday through Friday when the College is open.) An attempt should be made to resolve the concern informally. The faculty member must submit a report via e-mail to his or her dean and the student within 48 hours following the meeting with the student informing the dean of the outcome of the meeting.

If the faculty member is no longer employed by the College or is otherwise unavailable or unresponsive, the student may go directly to the division dean.

**Level 2**

If the matter cannot be resolved at Level 1, the student may submit a written appeal to the faculty member’s academic dean within ten business days following the meeting with the faculty member. The appeal must contain a statement of the problem, a description of any attempts to resolve the problem, relevant information and documentation, and the redress sought. The only issues that can be reviewed on appeal are those asserted in the filing of the initial grievance. No new issues can be raised or heard during the appeal review process. (Should the dean also be the instructor, the student should submit the appeal to the vice president for learning and student success or designee.

The dean or designee will confer with both the student and the instructor and seek to resolve the matter to the satisfaction of both parties. If a mutually satisfactory resolution is not obtained, the student must submit a written appeal to the vice president of learning and student success, who will convene the Grade Appeal Review Committee within ten business days.

**Grade Appeal Review Committee**

The Grade Appeal Review Committee is comprised of the vice president of learning and student success or designee and three full-time faculty members from each of the College’s three academic divisions (nine in total). Faculty members are elected annually by full-time faculty in each academic division and serve one-year terms. Faculty members may be re-elected, but may not serve more than two consecutive terms on the committee.

When an appeal reaches Level 3, the faculty members from the affected division will recuse themselves, and three faculty from the remaining six will be selected by lot to consider the appeal. The vice president of learning and student success or designee will preside over the review committee but will not participate (vote) in the committee’s final determination.

**Level 3**

The Grade Appeal Review Committee will convene within ten business days of being contacted by the vice president of learning and student success. The committee will examine all documentation and may, at its discretion, interview the student grievant, faculty member, and/or dean or designee. The committee also may interview other students and faculty members whom it believes may offer relevant information about the grade appeal under review. A determination will be reached by the committee by majority vote as follows:

- Affirm the appeal and recommend a change in the grade to the appropriate academic dean, or
- Deny the appeal and recommend the grade stands as originally assigned.

The vice president of learning and student success or designee will inform the student and faculty member in writing of the committee’s determination.

**Level 4**

If the student and/or faculty member are not satisfied with the decision of the Grade Appeal Review Committee, either may appeal to the college president or designee in writing within ten business days after the reply from the vice president of learning and student success or designee (from Level 3). The president or designee will first ensure that the College’s due process procedures as outlined above were followed. The president or designee will discuss the decision of the review committee with the student and/or faculty member as necessary and make a final decision regarding the issue within ten business days following receipt of the appeal. The decision of the president or designee is final.
SECTION 19.13 POLICY ON SEXUAL VIOLENCE, DOMESTIC VIOLENCE, DATING VIOLENCE, AND STALKING

19.13.1 Notice of Nondiscrimination
As a recipient of federal funds, John Tyler Community College (JTCC) is required to comply with Title IX of the Higher Education Amendments of 1972, 20 U.S.C. § 1681 et seq. (“Title IX”), which prohibits discrimination on the basis of sex in educational programs or activities, admission and employment. Under certain circumstances, sexual misconduct, sexual harassment, and similar conduct constitute sexual discrimination prohibited by Title IX. Inquiries concerning the application of Title IX may be referred to the College’s Title IX Coordinator or to the U.S. Department of Education’s Office for Civil Rights. The Title IX Coordinator is Sandra Kirkland, whose office is located at 800 Charter Colony Parkway, Midlothian, VA 23114, Room B213, and may be contacted by phone at 804 594-1566 or at 13101 Jefferson Davis Highway, Chester, VA 23831, Room M107e and may be contacted by phone at 804 706-5208 or by e-mail at skirkland@jtcc.edu.

19.13.2 Policy
JTCC is committed to providing an environment that is free from harassment and discrimination based on any status protected by law. This Policy supplements the following general policy statement set forth by the Virginia Community College System: This institution promotes and maintains educational opportunities without regard to race, color, sex, ethnicity, religion, gender, age (except when age is a bona fide occupational qualification), disability, national origin, or other non-merit factors. This Policy also addresses the requirements under the Violence Against Women Reauthorization Act of 2013, (also known as the Campus SaVE Act).

This Policy is not intended to substitute or supersede related criminal or civil law. Individuals should report incidents of sexual and domestic violence, dating violence, and stalking to law enforcement authorities. Criminal and civil remedies are available in addition to the potential remedies that the College may provide.

19.13.3 Purpose
The purpose of this Policy is to establish that the College prohibits discrimination, harassment, sexual assault, domestic violence, dating violence, stalking, and retaliation and to set forth procedures by which such allegations shall be filed, investigated and resolved.

19.13.4 Applicability
This Policy applies to all campus community members, including students, faculty, staff and third parties, e.g., contractors and visitors. Conduct that occurs off campus can be the subject of a complaint or report and will be evaluated to determine whether it violates this policy, e.g. if off-campus harassment has continuing effects that create a hostile environment on campus.

19.13.5 Definitions

Consent: Any sexual activity or sex act committed against one’s will, by the use of force, threat, intimidation, or rape, or through one’s mental incapacity or physical helplessness is without consent. Consent is knowing, voluntary, and clear permission by word or action, to engage in mutually-agreed upon sexual activity. Silence does not necessarily constitute consent. Past consent to sexual activities or a current or previous dating relationship does not imply ongoing or future consent. Consent to sexual activity (such as kissing or fondling) cannot be presumed to be consent for other sexual activity (such as intercourse). An individual cannot consent who is under the age of legal consent. The existence of consent is based on the totality of the circumstances, including the context in which the alleged incident occurred.

Mental incapacity means that condition of a person existing at the time which prevents the person from understanding the nature or consequences of the sexual act involved (the who, what, when, where, why, and how) and about which the accused knew or should have known. This includes incapacitation through the use of drugs or alcohol. Intoxication is not the same as incapacitation.

Physical helplessness means unconsciousness or any other condition existing at the time which otherwise rendered the person physically unable to communicate an unwillingness to act and about which the accused knew or should have known. Physical helplessness may be reached through the use of alcohol or drugs.

Dating Violence: Dating violence is violence, force, or threat that results in bodily injury or places one in reasonable apprehension of death, sexual assault, or bodily injury committed by a person who is or has been in a close relationship of a romantic or intimate nature with the other person. The existence of such a relationship shall be determined based on a consideration of the length of the relationship, the type of relationship, and the frequency of interaction between the persons involved in the relationship.

Domestic Violence: Domestic violence is violence, force, or threat that results in bodily injury or places one in reasonable apprehension of death, sexual assault, or bodily injury and that is committed by a person against such person’s family or household member, which includes a current or former spouse a person with whom the victim shares a child in common, or who is cohabiting with or has cohabited with the person as a spouse or intimate partner.
Sexual Misconduct: Sexual misconduct encompasses a range of behavior used to obtain sexual gratification against another’s will or at the expense of another. Sexual misconduct includes sexual harassment, sexual assault, sexual exploitation, and sexual violence.

Sexual Violence: Sexual violence is any intentional physical sexual abuse committed against a person’s will. Sexual violence includes rape, sexual assault, and sexual battery.

Stalking: Stalking occurs when someone, on more than one occasion, engages in conduct directed at another person with the intent to place, or knows or reasonably should know that the conduct places, that other person in reasonable fear of death, criminal sexual assault, or bodily injury to that other person or to that other person’s family or household member.

Third Party: A third party is any person who is not a student or employee of the College.

19.13.6 Retaliation
Any form of retaliation, including intimidation, threats, harassment, and other adverse action taken or threatened against any complainant or person reporting a complaint alleging a violation of this policy, or any person cooperating in the investigation of allegations of violations of this policy, to include testifying, assisting or participating in any manner in an investigation pursuant to this policy and the resolution procedures is strictly prohibited by this policy. Action may result in disciplinary or other action independent of the sanctions or interim measures imposed in response to the underlying allegations of violations of this policy.

19.13.7 Reporting Incidents
1. Members of the campus community who believe they have been subjected to any of these crimes should immediately report the incident to campus security or local police. All emergencies or any incident where someone is in imminent danger should be reported immediately to local police by dialing 911 or Campus Security at 804-897-6678 on the Midlothian Campus, at 804-796-4025 on the Chester Campus, at 804-897-6678 on the Featherstone-CCWA Campus and at 804-662-8730 at the Nursing Education Center immediately.

2. Whether or not a report is made to law enforcement, members of the campus community should report alleged violations of this policy to the Title IX Coordinator during normal business hours. The Title IX Coordinator is solely responsible for overseeing the prompt, fair, and impartial investigation and resolution of complaints filed with the College. To help ensure a prompt, fair, and impartial investigation and resolution, individuals are encouraged to complete a Complaint Form, found on the JTCC sexual misconduct web site at www.jtcc.edu/about/title-ix-and-sexual-misconduct/. The written complaint will be submitted
19.13.8 Handling of Reports and Investigations

The Title IX Coordinator will assist members of the campus community in reporting incidents to law enforcement authorities upon request. Members of the campus community may decline to notify law enforcement authorities if they wish. The College will comply with all requests for cooperation by the campus police or local law enforcement in investigations. The College may be required to suspend the Title IX investigation while the campus police or the local law enforcement agency gathers evidence. The College will resume its Title IX investigation as soon as the campus police or local law enforcement agency has completed gathering evidence. Otherwise, the College’s investigation will not be precluded or suspended on the grounds that criminal charges involving the same incident have been filed or that charges have been dismissed or reduced.

19.13.9 Confidentiality and Anonymous Reports

1. Individuals may be concerned about their privacy when they report a possible violation of this policy. The College has a responsibility to end conduct that violates this policy, prevent its recurrence, and address its discriminatory effects. For this reason, some College employees may not keep secret any report of sexual violence, domestic violence, dating violence, or stalking. The College expects employees to treat information they learn concerning incidents of reported violations of this policy with respect and with as much privacy as possible. College employees must share such information only with those College and law enforcement officials who must be informed of the information pursuant to this policy.

2. Responsible employees must report all alleged violations of this Policy to the Title IX Coordinator. Other campus employees have a duty to report sexual assault, domestic violence, dating violence, and stalking for federal statistical reporting purposes (Campus Security Authority (CSA) under the Clery Act). CSAs include student/conduct affairs personnel, campus law enforcement, local police, student activities staff, human resources staff, and advisors to student organizations. Reports received by the College concerning the abuse of a minor must be reported in compliance with state law.

3. If a complainant wishes to keep the report confidential, it is recommended that he or she reports the alleged conduct to someone with a duty to maintain confidentiality, e.g., mental health counselor or clergy. Employees may contact the Employee Assistance Program. If the complainant requests that the complainant’s identity is not released to anyone else, the College’s ability to investigate and take reasonable action in response to a complaint may be limited. In such cases, the College will evaluate the request(s) that a complaint remain confidential in the context of the College’s commitment to provide a reasonably safe and nondiscriminatory environment. In order to make such an evaluation, the Title IX Coordinator may conduct a preliminary investigation into the alleged violation of this policy and may weigh the request(s) against the following factors:

- The seriousness of the allegation(s);
- The complainant’s or alleged victim’s age;
- Whether there have been other similar complaints of against the same respondent;
- The respondent’s right to receive information about the allegations if the information is maintained by the College as an “education record” under FERPA;
- The applicability of any laws mandating disclosure.

Therefore, the College may pursue an investigation even if the complainant requests that no action is taken and the College will not be able to ensure confidentiality in all cases. The College will notify the complainant in writing when it is unable to maintain confidentiality or respect the complainant’s request for no further action.

4. The College will accept anonymous reports, but it will be limited in its ability to investigate and take reasonable
action. The College must have sufficient information to conduct a meaningful and fair investigation. A respondent has a right to know the name of the complainant and information regarding the nature of the allegations in order to defend against the complaint. The College, when reasonably available and when requested, may arrange for changes in academic, parking, transportation, or work arrangements after an alleged violation of this policy. When such accommodations are provided, the College will protect the privacy of the complainant to the extent possible while still providing the accommodation.

19.13.10 Amnesty
The College encourages the reporting of incidents that violate this policy. The use of alcohol or drugs should not be a deterrent to reporting an incident. When conducting the investigation, the College’s primary focus will be on addressing the alleged misconduct and not on alcohol and drug violations that may be discovered or disclosed. The College does not condone under-age drinking; however, the College will extend limited amnesty from punitive sanctioning in the case of drug or alcohol use to complainants, witnesses, and others who report incidents, provided that they are acting in good faith in such capacity. The College may provide referrals to counseling and may require educational options, rather than disciplinary sanctions, in such cases.

19.13.11 Timely Warnings
The College is required by federal law to issue timely warnings for reported incidents that pose a substantial threat of bodily harm or danger to members of the campus community. The College will ensure, to every extent possible, that an alleged victim’s name and other identifying information is not disclosed, while still providing enough information for members of the campus community to make decisions to address their own safely in light of the potential danger.

19.13.12 Interim Measures
1. Prior to the resolution of a complaint, the College may suspend or place on disciplinary or administrative leave the respondent when it is determined that the respondent’s continued presence on campus threatens the safety of an individual or of the campus community generally; may hamper the investigation into the alleged misconduct; or is necessary to stop threatening or retaliatory contact against the complainant or complainant’s witnesses. The College shall provide advance notice of such measures, except in cases where the individual’s presence constitutes a threat. In all cases, however, the College shall notify individuals subject to these interim measure(s) in writing of the specific facts and circumstances that make such interim measure(s) necessary and reasonable. Individuals subject to proposed interim measures shall have the opportunity to show why such measure(s) should not be implemented.
2. Notwithstanding the above, the College may impose a “no contact” order on each party, requiring the parties to refrain from having contact with one another, directly or through proxies, whether in person or by electronic means. The College also will enforce orders of protection issued by courts on all College property to the extent possible.
3. The College may implement other measures for either the complainant or the respondent if requested, appropriate, and reasonably available, whether a formal complaint has been filed or whether an investigation by either campus administrators or law enforcement agencies has commenced. Such measures may include, but are not limited to, course schedule adjustments, reassignment of duty, changing work arrangements, changing parking arrangements, rescheduling class work, assignments, and examinations, and allowing alternative class or work arrangements, such as independent study or teleworking.

19.13.13 Sexual and Domestic Violence Procedures
Anyone who has experienced sexual violence, domestic violence, dating violence, or stalking should do the following:
- Safely find a place away from harm.
- Call 911 or if on campus, contact campus police/security.
- Call a friend, a campus advocate, a family member or someone else you trust and ask her or him to stay with you.
- Go to the nearest medical facility/emergency room.
- If you suspect that you may have been given a drug, ask the hospital or clinic where you receive medical care to take a urine sample. The urine sample should be preserved as evidence. “Rape drugs,” such as Rohypnol and GHB, are more likely to be detected in urine than in blood.
- For professional and confidential counseling support, call the YWCA Greater Richmond Regional Hotline at 804-612-6126 or the Virginia Family Violence & Sexual Assault Hotline at 1-800-838-8238. Help is available 24 hours a day.
- You should take steps to preserve any physical evidence because it will be necessary to prove criminal domestic violence, dating violence, sexual assault, or stalking, or to obtain a protective order.
- Do not wash your hands, bathe, or douche. Do not urinate, if possible.
- Do not eat, blow your nose, drink liquids, smoke, or brush your teeth if oral contact took place.
- Keep the clothing worn when the incident occurred. If you change clothing, place the worn clothing in a paper bag.
- Do not destroy any physical evidence that may corroborate a complaint.
- Tell someone all the details you remember or write them down as soon as possible.
- Maintain text messages, pictures, online postings, video and other documentary or electronic evidence that may corroborate a complaint.

19.13.14 Written Notification of Rights and Options
Any student or employee who reports an incident of sexual
assault, domestic violence, dating violence, or stalking, or who is accused of committing such acts, whether the incident occurred on or off campus, shall receive a written explanation of their rights and options related to changes in academic, parking, and working arrangements, when requested and when reasonably available.

19.13.15 Support Services
1. All students and employees will receive information in writing of available counseling, health, mental health, victim advocacy, legal assistance, and other services available in the community and on campus.
2. For more information about available resources, go to: www.jtcc.edu/about/title-ix-and-sexual-misconduct/.

Local Community Resources
Greater Richmond Regional Hotline
804-612-6126
YWCA Sexual and Domestic Violence Hotline (Chesterfield and Richmond)
804-643-0888
Safe Harbor Hotline (Henrico County)
804-287-7877
The James House Hotline (Colonial Heights, City of Hopewell, City of Petersburg, Dinwiddie County, Prince George County, Southern Chesterfield County)
804-458-2840
Domestic and Sexual Violence Resource Center (Chesterfield County)
804-318-8265

National and State Resources
National Domestic Violence Hotline
1-800-799-SAFE (7233)
1-800-787-3224 (TTY)
National Sexual Assault Hotline
1-800-656-HOPE (4673)
National Teen Dating Abuse Hotline
1-866-331-9474
1-800-331-8453 (TTY)
Virginia Family Violence and Sexual Assault 24-hour Hotline
1-800-838-8238
LBGTQ Partner Abuse and Sexual Assault Hotline
1-866-356-6998

19.13.16 Education and Awareness
1. The College conducts a program to educate students and employees about this policy and its procedures. The education and awareness program is designed to promote awareness of sexual violence, domestic violence, dating violence, and stalking.
2. Incoming students and new employees must take part in a mandatory primary prevention and awareness program. The program, at a minimum, shall include:
   - A statement that the College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking;
   - The definition of domestic violence, dating violence, sexual assault, and stalking;
   - The definition of consent;
   - Safe and positive options for bystander intervention that may be carried out by an individual to prevent harm or intervene when there is a risk of domestic violence, dating violence, sexual assault, or stalking against a person other than such individual;
   - Information on risk reduction to recognize warning signs of abusive behavior and how to avoid potential attacks;
   - Information on possible sanctions, procedures to follow after an incident of sexual violence, domestic violence, dating violence or stalking, disciplinary procedures, and the protection of confidentiality; and
   - Written notification about available resources and services, and options for academic and work accommodations, if requested and reasonably available.
3. The College also conducts an ongoing prevention and awareness campaign for all students and employees. The campaign shall include, at a minimum, the information provided to incoming students and new employees.

19.13.17 Resolution of Complaints
1. The College has an obligation to provide prompt, fair, and impartial investigation and resolution of alleged violations to this policy and is committed to so doing. The Title IX Coordinator, Deputy Title IX Coordinator, and investigators, must receive annual training on sexual violence, domestic violence, dating violence, and stalking, and the conduct of investigations and hearings. The College may resolve complaints either by an informal or formal resolution process.
2. The parties may agree to proceed under the informal resolution process in matters not involving sexual violence, domestic violence, dating violence, or stalking. The formal resolution process will be applied (i) when any party that participated in the informal resolution process chooses to terminate the process, and (ii) to all matters that are not eligible for informal resolution.

19.13.18 Formal Resolution Process
1. Complainant’s Initial Meeting with the Title IX Coordinator or Deputy Title IX Coordinator.
   As soon as is practicable, the Title IX Coordinator or Deputy Title IX Coordinator will contact the complainant to schedule an initial meeting. If the complainant is not the alleged victim, the Title IX Coordinator or Deputy Title IX Coordinator also will contact the alleged victim as soon as possible to schedule an initial meeting. The complainant may be accompanied by an advisor of his or her choosing. At this initial meeting, the Title IX Coordinator or Deputy Title IX Coordinator will:
   a) Provide the complainant a copy of this policy;
   b) Provide the complainant with a Complaint Form, if necessary;
c) Provide a written explanation of the complainant’s rights and options related to changes in academic, parking, and working arrangements;
d) Explain avenues for formal resolution and informal resolution of the complaint;
e) Explain the steps involved in an investigation;
f) Discuss confidentiality standards and concerns with the complainant;
g) Determine whether the complainant wishes to pursue a resolution (formal or informal) through the College or no resolution of any kind;
h) Refer the complainant to campus and community resources, as appropriate; and
i) Discuss with the complainant, as appropriate, possible interim measures that may be taken or provided when necessary during the pendency of the investigative and resolution processes.

2. Respondent’s Initial Meeting with the Assigned Title IX Coordinator or Deputy Title IX Coordinator.

As soon as is reasonably practicable, the Title IX Coordinator or Deputy Title IX Coordinator will schedule an initial meeting with the respondent. The respondent may be accompanied by an advisor of his or her choosing. During the initial meeting with the respondent, the Title IX Coordinator or Deputy Title IX Coordinator will:
a) Provide the respondent, in writing, sufficient information to allow him or her to respond to the substance of the allegation;
b) Provide the respondent a copy of this policy;
c) Provide a written explanation of the respondent’s rights and options related to changes in academic, parking, and working arrangements;
d) Explain the College’s procedures for formal resolution and informal resolution of the complaint;
e) Explain the steps involved in an investigation;
f) Discuss confidentiality standards and concerns with the respondent;
g) Discuss non-retaliation requirements;
h) Inform the respondent of any interim measures that may be imposed on the respondent;
i) Refer the respondent to campus and community resources, as appropriate; and
j) Discuss with the respondent, as appropriate, possible interim measures that can be provided to the respondent during the pendency of the investigative and resolution processes.

3. Title IX Coordinator’s Initial Determination.
a) The College shall conduct an investigation of the complaint unless (i) the complainant does not want the College to pursue the complaint and the Title IX Coordinator has determined that the College can honor the request; (ii) it is clear on its face and based on the Title IX Coordinator’s or Deputy Title IX Coordinator’s initial meetings with the parties that no reasonable grounds exist for believing that the conduct at issue constitutes a violation of this policy. The Title IX Coordinator will consider the following factors in determining whether it is reasonable to investigate the complaint: the source and nature of the information; the seriousness of the alleged incident; the objectivity and credibility of the source of the information; and whether the individuals allegedly subjected to the conduct can be identified.
b) In the event that the Title IX Coordinator determines that an investigation of the complaint should not be conducted, he or she will document (in consultation, as necessary, with the complainant, respondent, and other College officials) the appropriate resolution of the complaint and inform the parties of the same. The Title IX Coordinator shall provide specific and clear written reason(s) why an investigation should not be conducted. The Title IX Coordinator shall provide the determination that the College will not investigate the matter to the complainant and the respondent, concurrently, within five (5) workdays of the completion of the initial meetings. This decision is final.

a) If the Title IX Coordinator determines that an investigation should be conducted, he or she will appoint an investigator within five (5) workdays of the completion of the initial meetings. The Title IX Coordinator will share his or her name and contact information with the complainant and respondent and will forward the complaint to the investigator. Within three (3) workdays of such appointment, the investigator, the complainant or the respondent may identify to the Title IX Coordinator in writing any potential conflict of interest posed by assigning such investigator to the matter. The Title IX Coordinator will consider such statements and will assign a different individual as investigator if it is determined that a material conflict of interest exists.
b) The investigator will contact the complainant and respondent promptly. In most cases, this should occur within three (3) workdays from the date of the investigator’s appointment or the conclusion of the informal resolution process, whichever is later. The investigator will schedule meetings with the parties. The parties may provide supporting documents, evidence, and recommendations of witnesses to be interviewed during the course of the investigation. Each party may have one advisor present during any meeting with the investigator; however, the advisor may not speak on the party’s behalf.
c) In the conduct of the investigation, the investigator should weigh the credibility and demeanor of the complainant, respondent, and witnesses; the logic and consistency of the evidence, motives, and any corroborating evidence.
d) The investigation of any alleged violation of this policy should be completed within 60 days of the filing of the complaint or the date on which the College becomes aware of the alleged violation, unless good cause exists to extend the timeframe. If more time is necessary, the parties will be notified in writing and given the reason for the delay and an estimated time of completion.
e) Both complainant and respondent will have the opportunity to review and respond to evidence obtained during the investigation. Each party also will have the
opportunity to review and comment on the written investigative report within seven (7) workdays of receiving the report. The final written investigative report and the parties' responses thereto shall be part of the record.

g) The investigator will forward the written investigative report to the Title IX Coordinator.

19.13.19 Determination of Title IX Coordinator and Corrective Action Report

1. The Title IX Coordinator will determine whether there is a preponderance of the evidence to find that the respondent violated this policy as alleged. In most cases, this should occur within five (5) workdays of receiving the written investigative report from the investigator. The “preponderance of the evidence” standard requires that the weight of the evidence, in totality, supports a finding that it is more likely than not that the alleged violation occurred.

2. If the Title IX Coordinator finds that the evidence does not prove by a preponderance of the evidence that the respondent committed the alleged violation, the matter will be closed. The Title IX Coordinator will make the determination in writing and distribute the written investigative report with such finding to the complainant and the respondent concurrently. All parties to whom the written investigative report is distributed pursuant to this policy should maintain it in confidence. Both the complainant and the respondent may appeal the finding under the procedure described below.

3. If the Title IX Coordinator finds by a preponderance of the evidence that a violation of this policy did occur, the Title IX Coordinator will make the determination in writing and distribute the written investigative report with such finding to the complainant and the respondent concurrently. All parties to whom the written investigative report is distributed pursuant to this policy should maintain it in confidence. Both the complainant and the respondent may appeal the finding under the procedure described below.

4. When the Title IX Coordinator finds that a violation has occurred, he or she shall write a separate written corrective action report that will contain recommendations for steps that should be taken to prevent recurrence of any such violation and to remedy any discriminatory effects. If interim measures as described above have been taken, the written corrective action report shall include a recommendation regarding continuation, suspension or modification of any such interim measures. The Title IX Coordinator shall distribute the written corrective action report to the complainant and respondent concurrently. In most cases, the written corrective action report should be completed within five (5) workdays after the distribution of the written investigative report. The written investigative report and the corrective action report may be submitted concurrently. The Title IX Coordinator also shall provide the written investigative report and the written corrective action report to the appropriate College official, as described below.

5. If the respondent is a student, the Deputy Title IX Coordinator will forward the reports to the Title IX Coordinator. Within ten (10) workdays, the Title IX Coordinator shall determine and impose appropriate sanctions, as described below. The respondent and the Deputy Title IX Coordinator shall receive written notification of sanction(s). When the respondent is a student, within five (5) workdays of receipt, the Title IX Coordinator or Deputy Title IX Coordinator may disclose to the complainant the sanctions imposed on the respondent that directly relate to the complainant as permitted by state and federal law, including the Federal Educational Rights and Privacy Act (FERPA) and the Virginia Freedom of Information Act, when such disclosure is necessary to ensure the safety of the complainant. The Title IX Coordinator or Deputy Title IX Coordinator also may disclose in writing to the complainant the final results of a disciplinary proceeding involving the respondent with regard to an alleged forcible or non-forcible sex offense, act of stalking, domestic violence or dating violence on the complainant, as permitted by state and federal law including FERPA and the Virginia Freedom of Information Act. The disclosure of final results must include only the name of the student, the violation committed, and any sanction imposed by the College against the student.

6. If the respondent is an employee, the Title IX Coordinator will forward the reports to associate vice president of Human Resources. Within ten (10) workdays, the associate vice president of human resources shall determine and impose appropriate sanctions, as described below. The respondent and the Title IX Coordinator shall receive written notification of sanction(s).
7. If the respondent is a third party, the Title IX Coordinator will forward the reports to the security manager or designee. Within ten (10) workdays, the security manager shall determine and impose appropriate sanctions, as described below. The respondent and the Title IX Coordinator shall receive written notification of sanction(s). The Title IX Coordinator may disclose to the complainant information as described above.

8. The respondent and the complainant will be advised of their right to appeal any finding or sanction in writing. The written notification also shall provide information on the appeals process.

19.13.20 Informal Resolution
1. After receiving a request from both parties to resolve the complaint with the informal resolution process, the Title IX Coordinator will appoint a College official to facilitate an effective and appropriate resolution. Within three (3) workdays of such appointment, the College official, the complainant or the respondent may identify to the Title IX Coordinator in writing any potential conflict of interest posed by assigning such official to the matter. The Title IX Coordinator will consider such statements and will assign a different individual to facilitate if it is determined that a material conflict of interest exists. Within five (5) workdays of the appointment, the College official will request a written statement from the parties to be submitted within ten (10) workdays. Each party may request that witnesses are interviewed. Within ten (10) workdays of receiving the written statements, the College official will hold a meeting(s) with the parties and coordinate informal resolution measures. The College official shall document the meeting(s) in writing. Each party may have one advisor of his or her choosing during any meeting; however, the advisor may not speak on the party’s behalf.

2. The informal resolution process should be complete within thirty (30) days in most cases, unless good cause exists to extend the timeframe. The parties will be notified in writing and given the reason for the delay and an estimated time of completion. Any party may request in writing that the informal resolution process be terminated at any time, in which case the formal resolution process will commence. In addition, any party can pursue formal resolution if he or she is dissatisfied with the proposed informal resolution.

3. Any resolution of a complaint through the informal process must address the concerns of the complainant and the responsibility of the College to address alleged violations of the Policy, while also respecting the due process rights of the respondent. Informal resolution remedies might include mandatory education, counseling, written counseling by an employee’s supervisor, or other methods. The College official will provide the complainant and respondent with a copy of the final written report concurrently. The final written report shall include the nature of the complaint, a meeting(s) summary, the informal resolution remedies applied, and whether the complaint was resolved through the informal resolution process.

4. There is no right of appeal afforded to the complainant or the respondent following the informal resolution process.

19.13.21 Sanctions & Corrective Actions
1. The College will take reasonable steps to prevent the recurrence of any violations of this policy and to correct the discriminatory effects on the complainant (and others, if appropriate). Sanctions for a finding of responsibility depend upon the nature and gravity of the misconduct, any record of prior discipline for similar violations, or both.

2. The range of potential sanctions and corrective actions that may be imposed against a student includes but is not limited to the following: required discrimination or harassment education, a requirement not to repeat or continue the discriminatory, harassing, or retaliatory conduct, verbal or written warning, a no-contact order, written or verbal apology, verbal or written warning, probation, suspension, and dismissal from the College.

3. Sanctions for faculty and staff shall be determined in accordance with the VCCS Policy Manual and the Department of Human Resource Management Standards of Conduct, respectively. Possible sanctions and corrective actions include required discrimination or harassment education, informal or formal counseling, reassignment, demotion, suspension, non-reappointment, and termination from employment.

4. Third parties, e.g., contractors, will be prohibited from having access to the campus. Depending on the violation, this prohibition may be permanent or temporary.

5. Title IX Coordinator and/or Deputy Title IX Coordinator will determine the final accommodations to be provided to the complainant, if any.

6. Sanctions imposed do not take effect until the resolution of any timely appeal. However, sanctions may take effect immediately when the continued presence of an individual on campus may threaten the safety of an individual or the campus community, generally.

Sanctions will continue in effect until such time as the appeal process is exhausted in such cases.

19.13.22 Appeals
Either the complainant or the respondent has the opportunity to appeal the outcome of the written investigative report or the sanction(s) recommended. Appeals shall be reviewed by the vice president of learning and student success or designee. Third parties may request that the College reconsider its decision in writing to the vice president of learning and student success or designee.

1. Either the complainant or the respondent has the opportunity to appeal the outcome of the written investigative report or the sanction(s) recommended. Individuals must submit a written request for appeal to the vice president of learning and student success or designee within ten (10) workdays of the outcome of the investigation or imposition of sanction(s), whichever is later. The appeal request must cite the reason(s) for the appeal and provide evidence to support those reason(s).

2. Appeals shall be granted for the following reasons only:
   • The investigator exhibited unfair bias which influenced the results of the investigation;
   • New evidence, unavailable at the time of the investigation that could substantially impact the
investigator’s finding. The appeal should explain why the evidence was unavailable previously and why such evidence may substantially impacts the investigator’s finding;
- Error in the conduct of the investigation that is of such magnitude as to deny fundamental fairness;
- The sanction(s) are unjustified by the evidence and/or mitigating factors warrant a lesser sanction or aggravating factors warrant a greater sanction.

19.13.23 Academic Freedom and Free Speech
1. This Policy does not allow censorship of constitutionally protected expression. Verbal or written communications, without accompanying unwanted sexual physical contact, is not sexual violence or sexual assault. Verbal or written communications constitute sexual harassment only when such communications are sufficiently severe, pervasive, and objectively offensive that they undermine and detract from an employee’s work performance or a student’s educational experience.
2. In addressing all complaints and reports of alleged violations of this Policy, the College will take all permissible actions to ensure the safety students and employees while complying with any and all applicable guidance regarding free speech rights of students and employees. This policy does not apply to curriculum, curricular materials, or abridge the use of particular textbooks.

19.13.24 False Allegations
Any individual who knowingly files a false complaint under this Policy, who knowingly provides false information to College officials, or who intentionally misleads College officials who are involved in the investigation or resolution of a complaint may be subject to disciplinary action, up to and including dismissal for students and termination of employment for faculty and staff. An allegation that cannot be proven by a preponderance of the evidence is not necessarily proof of knowingly filing a false complaint.

19.13.25 Consensual Relationships
Consenting romantic and sexual relationships between faculty and students, although not expressly forbidden, are generally deemed unwise and are strongly discouraged. Consent by the student in such a relationship may be suspect, given the fundamentally asymmetric nature of the relationship. The relationship also may be viewed in different ways by each of the parties, particularly in retrospect. Furthermore, circumstances may change, and conduct that was previously welcome may become unwelcome.

19.13.26 Record Keeping
The Title IX Coordinator shall maintain, in a confidential manner, for at least five (5) years, paper or electronic files of all complaints, witness statements, documentary evidence, written investigative reports, written corrective action reports, sanctions, appeal hearings and associated documents, the responses taken campus personnel for each complaint, including any interim and permanent steps taken with respect to the complainant and the respondent, and a narrative of all action taken to prevent recurrence of any harassing incident(s), including any written documentation.

For the most up-to-date version of the policy, go to www.jtcc.edu/about/title-ix-and-sexual-misconduct/.

STUDENT SUBSTANCE ABUSE POLICY
 Instructional Responsibility
The College believes that it has a responsibility to create, enforce, and constantly monitor an institutional policy on substance abuse prevention and that all students, faculty, and staff are expected to know and adhere to this policy.

The possession, use, manufacture, sale, and/or distribution of illegal drugs and other controlled substances by students, faculty, or staff at John Tyler Community College will not be tolerated. All actions consistent with the law and individual privacy will be taken by the College to eliminate drugs on the campuses and to deal fairly with individuals found in violation of both Virginia’s statutes and federal laws pertaining to such substances.

Responsible and Legal Use of Alcoholic Beverages
John Tyler Community College neither encourages nor discourages the use of alcoholic beverages but rather discourages the abusive use of alcohol. Further, the College expects that all deliberations concerning the availability of alcoholic beverages at any officially designated College activity will include a full and realistic discussion of the appropriateness of such consumption. Individual members of the College community are responsible for their decisions concerning their use of alcohol, as well as their behavior as a consequence of these decisions.

All members of the College community are expected to know and act in accordance with the Commonwealth of Virginia laws and institutional regulations concerning the purchase, possession, consumption, sales, and storage of alcoholic beverages. Persons who violate these laws and regulations are subject to prosecution and College disciplinary action.

The College assumes no responsibility for any liability incurred at an event, not sponsored by the College, where alcohol is served and/or sold. Students and recognized student organizations are always expected to conduct themselves in accordance with the laws of the Commonwealth of Virginia and to assume full responsibility for their actions, activities, and events.

Specific Areas of Emphasis
1. The State Board for Community Colleges has delegated to each individual College’s Board the responsibility for taking action on requests to serve beer at student-associated community college functions. Such requests must be submitted to the dean of student services who will forward each request with his or her recommendation to the president of the College. The president, after reviewing the specific nature of the function, may approve or reject the request.
2. College funds may be used only for the purchase
of alcoholic beverages to be served and/or sold at an approved College activity for which a one-day banquet license to serve beer or wine has been obtained in accordance with the conditions established by the State Alcoholic Beverage Control Board.

3. Non-alcoholic beverages and food items must be present at all College-sponsored events where alcoholic beverages are served.

4. Alcoholic beverages must never be mentioned in the advertising or publicizing of a College-sponsored event.

5. Organizations serving alcohol at College-sponsored events should not permit the entry or exit of persons with beverage containers.

6. Organizations should check for proper age identification of individuals attending events where alcohol is served and implement a process that visually identifies those participants of legal drinking age.

7. Any organization, as well as its leadership, sponsoring an event at the College will be responsible for following all State laws relative to the serving and/or selling of alcoholic beverages.

8. College community members are expected to know and adhere to the following:
   a. Any sale of alcoholic beverage requires an ABC license.
   b. Alcoholic beverages are not to be given or sold to persons under the legal drinking age of twenty-one.
   c. Alcoholic beverages are not to be given or sold to persons who are intoxicated.
   d. State law prohibits the following: drinking in public, possession of an alcoholic beverage by a person under the legal drinking age, falsely representing one's age for the purpose of procuring alcohol, and purchasing an alcoholic beverage for a person who is under the legal drinking age.

Drug Enforcement Practices
Possession, use, manufacture, sale and distribution of illegal substances are crimes. John Tyler Community College will cooperate with law enforcement authorities to enforce current statutes. Students, faculty, and staff may be subject to prosecution by civil authorities for violations of these laws. Penalties may be severe, including the loss of civil rights.

Illegal involvement with drugs and/or the unauthorized purchase, consumption, possession, sale or distribution of alcohol on the campus also will result in disciplinary action by the College. Students who engage in such illegal activity are subject to disciplinary actions as defined in the Student Rights and Responsibilities section of this handbook. Such actions could result in dismissal from the College.

Substance Abuse Education and Prevention
Students, faculty, and staff should recognize that substance abuse interferes with their abilities to succeed academically and professionally. Substance abuse poses numerous threats to human health and can kill. It is also contrary to what institutions of higher learning strive to attain: development of individual character, attainment of human potential, informed and responsible citizenry, and respect for the laws and norms governing society.

Alcohol consumption causes a number of marked changes in behavior. Even low doses significantly impair the judgment and coordination required to drive a car safely, increasing the likelihood that the driver will be involved in an accident. Low to moderate doses of alcohol cause marked impairments in higher mental functions, severely altering a person’s ability to learn and remember information. Very high doses cause respiratory depression and death. If combined with other depressants of the central nervous system, much lower doses of alcohol will produce the effects just described.

Repeated use of alcohol can lead to dependence. Sudden cessation of alcohol intake is likely to produce withdrawal symptoms, including severe anxiety, tremors, hallucinations, and convulsions. Alcohol withdrawal can be life threatening. Long-term consumption of large quantities of alcohol, particularly when combined with poor nutrition, can also lead to permanent damage to vital organs such as the brain and the liver.

Mothers who drink alcohol during pregnancy may give birth to infants with fetal alcohol syndrome. These infants have irreversible physical abnormalities and cognitive deficits. In addition, research indicates that children of alcoholic parents are at greater risk than other youngsters of becoming alcoholics.

The College will annually present programs on the dangers of substance abuse. Students, college personnel, and members of the community will be encouraged to participate in these educational programs.

Substance Abuse Counseling and Referral
The College will establish and actively publicize a system whereby students who think that they are at risk of drug or alcohol abuse can have access to appropriate counseling and referral services. The environment will be one in which a student may discuss substance abuse problems openly and without fear of reprisal. To the extent permissible by law, student confidentiality will be protected. The College also will establish an employee assistance program for faculty and classified staff working at the institution. Information on the State Employee Assistance Service and similar referral sources will be distributed in each segment of the College. The College’s Human Resources Office will implement a program of supervisor training that addresses the special skills required for effective counseling and referral and discusses the issue of confidentiality.

The College will maintain a close working association with community agencies that provide counseling and treatment for substance abuse. The Counseling Centers and the Human Resources Office will establish and make available to students, faculty, and staff information about these agencies, organizations, and hospitals.
VIRGINIA LAWS PERTAINING TO ALCOHOL & CONTROLLED SUBSTANCES

Alcohol
Virginia’s Alcoholic Beverage Control Act contains a variety of laws governing the possession, use, and consumption of alcoholic beverages. The Act applies to the students and employees of this institution. As required by the Federal Drug-Free Schools and Communities Act of 1989, the pertinent laws, including sanctions for their violation are summarized below.

1. It is unlawful for any person under age 21 to purchase or possess any alcoholic beverage. Violation of the law exposes the violator to a misdemeanor conviction for which the punishment is confinement in jail for up to twelve months and a fine up to $2,500, either or both. Additionally, such person’s Virginia driver’s license may be suspended for a period of not more than one year.
2. It is unlawful for any person to sell alcoholic beverages to persons under the age of 21 years of age. Violation of the law exposes the violator to a misdemeanor conviction for which the punishment is confinement in jail for up to twelve months and a fine up to $2,500, either or both.
3. It is unlawful for any person to purchase alcoholic beverages for another when, at the time of the purchase, he knows or has reason to know that the person for whom the alcohol is purchased is under the legal drinking age. The criminal sanction for violation of the law is the same as #2 above.
4. It is unlawful for any person to consume alcoholic beverages in unlicensed public places. Persons violating the law, upon conviction, exposes the violator to a misdemeanor conviction for which the punishment is a fine up to $250.

Controlled Substances and Illicit Drugs
The unlawful possession, distribution, and use of controlled substances and illicit drugs, as defined by the Virginia Drug Control Act, are prohibited in Virginia. Controlled substances are classified under the Act into “schedules,” ranging from Schedule I through Schedule VI, as defined in sections 54.1-3446 through 54.1-3456 of the Code of Virginia (1950), as amended. As required by the Federal Drug-Free Schools and Communities Act of 1989, the pertinent laws, including sanctions for their violation, are summarized below.

1. Possession of a controlled substance classified in Schedule I or II of the Drug Control Act, upon conviction, exposes the violator to a felony conviction for which the punishment is confinement in jail for up to fifteen years and a fine up to $100,000, either or both. If the amount of marijuana involved is more than five pounds, the crime is a felony with a sanction of imprisonment from five to forty years and a fine up to $100,000. Upon a second conviction, the violator must be imprisoned for not less than five years but may suffer life imprisonment and fined up to $100,000.
2. Possession of marijuana, upon conviction, exposes the violator to a misdemeanor conviction for which the punishment is confinement in jail for up to one year and a fine up to $2,500, either or both. Upon a second conviction, punishment is confinement in jail for up to one year and a fine up to $2,500, either or both.
3. Possession of controlled substance classified in Schedule IV of the Drug Control Act, upon conviction, exposes the violator to a misdemeanor conviction for which the punishment is confinement in jail for up to six months and a fine up to $1,000, either or both.
4. Possession of controlled substance classified in Schedule V of the Drug Control Act, upon conviction, exposes the violator to a misdemeanor conviction for which the punishment is a fine up to $500.
5. Possession of a controlled substance classified in Schedule VI of the Drug Control Act, upon conviction, exposes the violator to a misdemeanor conviction for which the punishment is a fine up to $250.
6. Possession of a controlled substance classified in Schedule I or II of the Drug Control Act with the intent to sell or otherwise distribute, upon conviction, exposes the violator to a felony conviction for which the punishment is imprisonment from five to forty years and a fine up to $100,000. Upon a second conviction, the violator must be imprisoned for not less than five years but may suffer life imprisonment and fined up to $100,000.
7. Possession of controlled substance classified in Schedules III, IV or V of the Drug Control Act with the intent to sell or otherwise distribute, upon conviction, exposes the violator to a misdemeanor conviction for which the punishment is confinement in jail for up to one year and a fine up to $2,500, either or both.
8. Possession of less than one-half ounce of marijuana with intent to sell or otherwise distribute, upon conviction, exposes the violator to a misdemeanor conviction for which the punishment is confinement in jail for up to one year and a fine up to $2,500, either or both. If the amount of marijuana involved is more than one-half ounce to five pounds, the crime is a felony with a sanction of imprisonment from one to ten years, or in the discretion of the jury or the court trying the case without a jury, confinement in jail for up to one year and a fine up to $2,500, either or both. If the amount of marijuana involved is more than five pounds, the crime is a felony with a sanction of imprisonment from five to thirty years.
SECTION 19.16 POLICY ON EXPRESSIVE SPEECH

19.16.1 Purpose
To establish policy addressing free expression on College campuses.

19.16.2 Policy
This policy applies to all buildings, grounds and other spaces owned or controlled by John Tyler Community College.

Examples of events and activities covered by this policy include:
§ Meetings and other group activities of student organizations;
§ Speeches, performances, demonstrations, rallies, vigils, and other events by students, student organizations, and outside groups invited by student organizations;
§ Distributions of literature, such as leaflets and pamphlets; and
§ Any other expression protected by the First Amendment to the U.S. Constitution.

19.16.3 Policy Statement
College property is primarily dedicated to academic, student life and administrative functions. The College also represents a marketplace of ideas, and especially for students, many areas on its campuses represent public forums for speech and other expressive activities. The College may place restrictions on expressive activities occurring indoors, but especially for students and student organizations, the outdoor areas of the campuses remain venues for the free expression, including speeches, demonstrations, and the distribution of literature. Indoors and outdoors, the College shall not interfere with the rights of individuals and groups to free expression of their views or impermissibly regulate their speech based on its content or viewpoint. Nevertheless, the College may establish reasonable time, place, and manner restrictions on expressive activity, providing such restrictions are content-neutral, narrowly tailored to serve a significant governmental interest, and allow ample alternative channels for communication of the information. Free inquiries, expressions and assemblies are guaranteed to all students and employees provided no event or expressive activity shall be conducted in such a manner or at such a time or place as to violate or hinder the rights of others within the campus community or substantially disrupt normal College operations.

19.16.4 Procedures
A. Reserving College Facilities
1. If students, student organizations, or College employees desire to reserve campus facilities, they shall submit their requests at least twenty-four hours in advance to the Office of Student Activities. Note: for events and activities of more than twenty-five individuals more notice may be required to allow for sufficient logistical support and to ensure the safety and security of the College.
2. Individuals and organizations who are not members of the College community (i.e., neither students, student organizations, nor College employees) desiring to reserve College facilities must be sponsored by a recognized student organization or the College in order to conduct expressive activities or events on College campuses. The student organization must be involved in the planning and execution of any activity or event and will be held responsible for any violations of policies, procedures, or guidelines committed by the external individuals, group, or organization.[1]

3. The College has designated administrative offices, libraries, laboratories, and (during instructional hours) classrooms as areas that are not available for expressive activity.

4. Students, student organizations, and College employees may request to reserve campus facilities on a first-come, first-serve basis. Such requests may be denied for the following reasons:
   a. The requested venue is an indoor facility that the College has designated as not available for expressive activity under section 19.16.4.3 of this policy;
   b. The requested venue is an indoor facility and the request conflicts with restrictions enacted pursuant to 19.16.4.3 of his policy;
   c. The venue is already reserved for another event;
   d. The activity will attract a crowd larger than the venue can safely contain;
   e. The activity will substantially disrupt another event being held at a neighboring venue;
   f. The activity will substantially disrupt College operations (including classes);
   g. The activity is a clear and present threat to public safety, according to the College’s Security Department;
   h. The activity will occur during College Final examination periods; or
   i. The activity is unlawful.

5. During the event, the student, student organization, or College employee requesting the reservation is responsible for preserving and maintaining the reserved facility. If the event or activity results in any damages to the reserved facility, the person(s) or organization (and its officers, if applicable) shall assume responsibility.

6. When assessing a request to reserve campus facilities, the College and its administrators will not consider the content or viewpoint of the expression or the possible reaction to said expression. The College and its administrators will not impose restrictions on students, student organizations, or College employees due to the content or viewpoint of their expression or the possible reaction to that expression. In the event that other persons react negatively to a student’s, student organization’s, or College employee’s expression, College officials (including College Security) shall take all necessary steps to ensure public safety while allowing the expressive activity to continue.

7. Students, recognized student organizations, and College employees receive a 100% discount on rental fees for the use of rooms or facilities and equipment unless (a) the organization is charging admission fees, (b) vendors are charged to participate in the event, (c) the majority
of attendees are not John Tyler students, faculty, or staff, or (d) the primary purpose of the activity or event is commercial or unrelated to the educational mission of the College.

8. In the event that multiple individuals or organizations submit conflicting reservation requests, the following order of precedence shall govern: (1) official College sponsored activities and events; (2) recognized student organization activities and events; (3) student activities and events; and (4) all other activities and events.

B. Spontaneous Expressive Activity
1. Students, student organizations, and College employees have the right to engage in unscheduled or spontaneous expressive outdoor events and activities as long as they do not (a) block access to campus buildings, (b) obstruct vehicular or pedestrian traffic, (c) substantially disrupt previously scheduled campus events, (d) substantially disrupt College operations, (e) constitute unlawful activity, or (f) create a clear and present threat to public safety, according to the College’s Security Department.

2. College personnel may not impose restrictions on students, student organizations, or their sponsored guests who are engaging in spontaneous expressive activities due to the content or viewpoint of their expression or the possible reaction to that expression. In the event that other persons react negatively to these activities, College officials (including College Security) shall take all necessary steps to ensure public safety while allowing the expressive activity to continue.

3. The expression of competing viewpoints or multiple speakers in proximity to each other does not, in and of itself, constitute a substantial disruption.

4. The expression of competing viewpoints or multiple speakers in proximity to each other does not, in and of itself, constitute a substantial disruption.

VCCS COMPUTER ETHICS POLICY
Thousands of users share VCCS Information Technology resources. Everyone must use these resources responsibly since misuse by even a few individuals has the potential to disrupt VCCS business or the work of others. Therefore you must exercise ethical behavior when using these resources.

State Law (Article 7.1 of Title 18.2 of the Code of Virginia) classifies damage to computer hardware or software (18.2-152.4), invasion of privacy (18.2-152.5), or theft of computer services (18.2-152.6) or computer systems as (misdemeanor) crimes. Computer fraud (18.2-152.3) and use of a computer as an instrument of forgery (18.2-152.14) can be felonies. The VCCS’s internal procedures for enforcement of its policy are independent of possible prosecution under the law.

Definition
VCCS information technology resources include mainframe computers, servers, desktop computers, notebook computers, handheld devices, networks, software, data files, facilities, and the related supplies.

Standards
The following standards shall govern the use of all VCCS information technology resources:

1. All users of VCCS IT resources must adhere to Virginia Department of Human Resource Management Policy 1.75 – Use of Internet and Electronic Communication Systems.

2. You must use only those computer resources that you have the authority to use. You must not provide false or misleading information to gain access to computing resources. The VCCS may regard these actions as criminal acts and may treat them accordingly. You must not use VCCS IT resources to gain unauthorized access to computing resources of other institutions, organizations, individuals, etc.

3. The System Office and colleges reserve the right (with or without cause) to monitor, access and disclose all data created, sent, received, processed, or stored on VCCS systems to ensure compliance with VCCS policies and federal, state, or local regulations. College or System Office officials will have the right to review and/or confiscate (as needed) any equipment (Commonwealth of Virginia (COV) owned or personal) connected to a COV-owned device or network.

4. The System Office and Colleges shall use an authorized COV warning banner to communicate that IT systems and their use may be monitored and/or confiscated by authorized personnel; and there is no expectation of privacy when using a Commonwealth IT system.

5. Require acknowledgment that monitoring of IT systems and data may include, but is not limited to, network traffic; application and data access; keystrokes (only when required for security investigations and approved in writing by the Agency Head); user commands; e-mail and Internet usage; and message and data content.

6. Local Administrator rights, or the equivalent, on non-Microsoft Windows-based IT systems shall be limited to only authorized staff as appropriate to prevent users from:
   a. Installing or using proprietary encryption hardware/software on VCCS systems;
   b. Tampering with security controls configured on their workstations;
   c. Installing personal software on a VCCS system;
   d. Adding hardware to, removing hardware from, or modifying hardware on a VCCS system.

7. You must not authorize anyone to use your computer accounts for any reason. You are responsible for all use of your accounts. You must take all reasonable precautions, including password maintenance and file protection measures, to prevent use of your account by unauthorized persons. You must not, for example, share your password with anyone.

8. The transmission of unencrypted sensitive data over the internet shall be prohibited unless properly encrypted and approved by the agency head. When connected to internal networks from COV guest networks or non-COV networks, data transmission shall only use full tunneling and not use split tunneling.

of attendees are not John Tyler students, faculty, or staff, or (d) the primary purpose of the activity or event is commercial or unrelated to the educational mission of the College.

8. In the event that multiple individuals or organizations submit conflicting reservation requests, the following order of precedence shall govern: (1) official College sponsored activities and events; (2) recognized student organization activities and events; (3) student activities and events; and (4) all other activities and events.

B. Spontaneous Expressive Activity
1. Students, student organizations, and College employees have the right to engage in unscheduled or spontaneous expressive outdoor events and activities as long as they do not (a) block access to campus buildings, (b) obstruct vehicular or pedestrian traffic, (c) substantially disrupt previously scheduled campus events, (d) substantially disrupt College operations, (e) constitute unlawful activity, or (f) create a clear and present threat to public safety, according to the College’s Security Department.

2. College personnel may not impose restrictions on students, student organizations, or their sponsored guests who are engaging in spontaneous expressive activities due to the content or viewpoint of their expression or the possible reaction to that expression. In the event that other persons react negatively to these activities, College officials (including College Security) shall take all necessary steps to ensure public safety while allowing the expressive activity to continue.

3. The expression of competing viewpoints or multiple speakers in proximity to each other does not, in and of itself, constitute a substantial disruption.

4. The expression of competing viewpoints or multiple speakers in proximity to each other does not, in and of itself, constitute a substantial disruption.

VCCS COMPUTER ETHICS POLICY
Thousands of users share VCCS Information Technology resources. Everyone must use these resources responsibly since misuse by even a few individuals has the potential to disrupt VCCS business or the work of others. Therefore you must exercise ethical behavior when using these resources.

State Law (Article 7.1 of Title 18.2 of the Code of Virginia) classifies damage to computer hardware or software (18.2-152.4), invasion of privacy (18.2-152.5), or theft of computer services (18.2-152.6) or computer systems as (misdemeanor) crimes. Computer fraud (18.2-152.3) and use of a computer as an instrument of forgery (18.2-152.14) can be felonies. The VCCS’s internal procedures for enforcement of its policy are independent of possible prosecution under the law.

Definition
VCCS information technology resources include mainframe computers, servers, desktop computers, notebook computers, handheld devices, networks, software, data files, facilities, and the related supplies.

Standards
The following standards shall govern the use of all VCCS information technology resources:

1. All users of VCCS IT resources must adhere to Virginia Department of Human Resource Management Policy 1.75 – Use of Internet and Electronic Communication Systems.

2. You must use only those computer resources that you have the authority to use. You must not provide false or misleading information to gain access to computing resources. The VCCS may regard these actions as criminal acts and may treat them accordingly. You must not use VCCS IT resources to gain unauthorized access to computing resources of other institutions, organizations, individuals, etc.

3. The System Office and colleges reserve the right (with or without cause) to monitor, access and disclose all data created, sent, received, processed, or stored on VCCS systems to ensure compliance with VCCS policies and federal, state, or local regulations. College or System Office officials will have the right to review and/or confiscate (as needed) any equipment (Commonwealth of Virginia (COV) owned or personal) connected to a COV-owned device or network.

4. The System Office and Colleges shall use an authorized COV warning banner to communicate that IT systems and their use may be monitored and/or confiscated by authorized personnel; and there is no expectation of privacy when using a Commonwealth IT system.

5. Require acknowledgment that monitoring of IT systems and data may include, but is not limited to, network traffic; application and data access; keystrokes (only when required for security investigations and approved in writing by the Agency Head); user commands; e-mail and Internet usage; and message and data content.

6. Local Administrator rights, or the equivalent, on non-Microsoft Windows-based IT systems shall be limited to only authorized staff as appropriate to prevent users from:
   a. Installing or using proprietary encryption hardware/software on VCCS systems;
   b. Tampering with security controls configured on their workstations;
   c. Installing personal software on a VCCS system;
   d. Adding hardware to, removing hardware from, or modifying hardware on a VCCS system.

7. You must not authorize anyone to use your computer accounts for any reason. You are responsible for all use of your accounts. You must take all reasonable precautions, including password maintenance and file protection measures, to prevent use of your account by unauthorized persons. You must not, for example, share your password with anyone.

8. The transmission of unencrypted sensitive data over the internet shall be prohibited unless properly encrypted and approved by the agency head. When connected to internal networks from COV guest networks or non-COV networks, data transmission shall only use full tunneling and not use split tunneling.
9. You must use your computer resources only for authorized purposes. Students or staff, for example, may not use their accounts for private consulting or to support a personal business venture. You must not use your computer resources for unlawful purposes, such as the installation of fraudulently or illegally obtained software. Use of external networks connected to any VCCS facility must comply with the policies of acceptable use promulgated by the organizations responsible for those networks. The VCCS shall document the user’s acceptance of the System Office or college Acceptable Use Policy before or as soon as practicable after, gaining access to VCCS IT systems.

10. Other than material known to be in the public domain, you must not access, alter, copy, move or remove information, proprietary software or other files (including programs, members of subroutine libraries, data and electronic mail) without prior authorization.

11. The data owner, data custodian, security officer, appropriate college official or other responsible party may grant authorization to use electronically stored materials in accordance with policies, copyright laws and procedures.

12. You must not distribute or disclose third party proprietary software without prior authorization from the licensor. You must not install proprietary software on systems not properly licensed for its use.

13. You must not use any computing facility irresponsibly or needlessly affect the work of others. This includes transmitting or making accessible offensive, annoying or harassing material. This includes intentionally, recklessly, or negligently damaging systems, intentionally damaging or violating the privacy of information not belonging to you. This includes the intentional misuse of resources or allowing misuse of resources by others. This includes loading software or data from untrustworthy sources, such as free-ware, onto official systems without prior approval.

14. You should report any violation of these regulations by another individual and any information relating to a flaw or bypass of computing facility security to the Information Technology Services Center or the Information Security Officer.

15. You must not use the Commonwealth’s Internet access or electronic communication in cases where it:
   a. interferes with the user’s productivity or work performance, or with any other employee’s productivity or work performance;
   b. adversely affects the efficient operation of the computer system;
   c. results in any personal gain or profit to the user;
   d. violates any provision of this policy, any supplemental policy adopted by the agency supplying the Internet or electronic communication systems, or any other policy, regulation, law or guideline as set forth by local, State or Federal law. (See Code of Virginia §2.1-804-805; §2.2-2827 as of October 1, 2001.)

Note: Any user of VCCS IT resources employing the Commonwealth’s Internet or electronic communication systems for personal use must present their communications in such a way as to be clear that the communication is personal and is not a communication of the agency or the Commonwealth.

Enforcement Procedure

1. Faculty, staff, students, and patrons at the college or System Office should immediately report violations of information security policies to the Information Technology Services Center (ITSC).

2. If the accused is an employee, the Director of ITSC will collect the facts of the case and identify the offender. If, in the opinion of the Director of ITSC, the alleged violation is of a serious nature, the Director of ITSC will notify the offender’s supervisor. The supervisor, in conjunction with the College or System Human Resources Office and the Director of ITSC, will determine the appropriate disciplinary action. Disciplinary actions may include but are not limited to:
   a. Temporary restriction of the violator’s computing resource access for a fixed period of time, generally not more than six months.
   b. Restitution for damages, materials consumed, machine time, etc. on an actual cost basis. Such restitution may include the cost associated with determining the case facts.
   c. Disciplinary action for faculty and classified staff in accordance with the guidelines established in the State Standards of Conduct Policy.

3. In the event that a student is the offender, the accuser should notify the dean of students office. The dean of students or designee, in cooperation with the Director of ITSC, will determine the appropriate disciplinary actions which may include but are not limited to:
   a. Temporary restriction of the violator’s computing resource access for a fixed period of time, generally not more than six months.
   b. Restitution for damages, materials consumed, machine time, etc. on an actual cost basis. Such restitution may include the cost associated with determining the case facts.
   c. Disciplinary action shall be in accordance with the college student standards of conduct.

4. The College president or designee will report any violations of state and federal law to the appropriate authorities.

5. All formal disciplinary actions taken under this policy are subject to the Commonwealth’s personnel guidelines and the accused may pursue findings through the appropriate grievance procedure.
INFORMATION TECHNOLOGY STUDENT/PATRON ACCEPTABLE USE AGREEMENT

By using the College or System Office technology resources, you acknowledge this agreement and hereby certify that you understand the following terms and provisions and that you accept the responsibility of adhering to the same. You further acknowledge that should you violate this agreement, you will be subject to disciplinary action.

As a user of the Virginia Community College System's local and shared computer systems, I understand and agree to abide by the following acceptable use agreement terms. These terms govern my access to and use of the information technology applications, services and resources of the VCCS and the information they generate.

The college has granted access to me as a necessary privilege in order to perform authorized functions at the institution where I am currently enrolled. I will not knowingly permit use of my entrusted access control mechanism for any purposes other than those required to perform authorized functions related to my status as a student. These include logon identification, password, workstation identification, user identification, digital certificates or 2-factor authentication mechanisms.

I will not disclose information concerning any access control mechanism unless properly authorized to do so by my enrolling college. I will not use any access mechanism that the college has not expressly assigned to me. I will treat all information maintained on the college computer systems as strictly confidential and will not release information to any unauthorized person.

Computer software, databases, and electronic documents are protected by copyright law. A copyright is a work of authorship in a tangible medium. Copyright owners have the sole right to reproduce their work, prepare derivatives or adaptations of it, and distribute it by sale, rent, license lease, or lending and/or to perform or display it. A student must either have an express or implied license to use copyrighted material or data, or be able to prove fair use. Students and other users of college computers are responsible for understanding how copyright law applies to their electronic transactions. They may not violate the copyright protection of any information, software, or data with which they come into contact through the college computing resources. Downloading or distributing copyrighted materials such as documents, movies, music, etc. without the permission of the rightful owner may be considered copyright infringement, which is illegal under federal and state copyright law. Use of the college's network resources to commit acts of copyright infringement may be subject to prosecution and disciplinary action.


I agree to abide by all applicable state, federal, VCCS, and college policies, procedures and standards that relate to the Virginia Department of Human Resource Management Policy 1.75 – Use of Internet and Electronic Communication Systems, VCCS Information Security Standard and the VCCS Information Technology Acceptable Use Standard. These include, but are not limited to:

1. Attempting to gain access to information owned by the college or by its authorized users without the permission of the owners of that information;
2. Accessing, downloading, printing, or storing information with sexually explicit content as prohibited by law or policy;
3. Downloading or transmitting fraudulent, threatening, obscene, intimidating, defamatory, harassing, discriminatory, or otherwise unlawful messages or images;
4. Installing or downloading computer software, programs, or executable files contrary to policy;
5. Uploading or downloading copyrighted materials or proprietary agency information contrary to policy;
6. Sending e-mail using another's identity, an assumed name, or anonymously;
7. Attempting to intercept or read messages not intended for them;
8. Intentionally developing or experimenting with malicious programs (viruses, worms, spy-ware, keystroke loggers, phishing software, Trojan horses, etc.) on any college–owned computer;
9. Knowingly propagating malicious programs;
10. Changing administrator rights on any college-owned computer, or the equivalent on non-Microsoft Windows based systems;
11. Using college computing resources to support any commercial venture or for personal financial gain.

Students must follow any special rules that are posted or communicated to them by responsible staff members, whenever they use the college computing laboratories, classrooms, and computers in the Libraries. They shall do nothing intentionally that degrades or disrupts the computer systems or interferes with systems and equipment that support the work of others. Problems with college computing resources should be reported to the staff in charge or to the Information Technology Help Desk.

If I observe any incidents of non-compliance with the terms of this agreement, I am responsible for reporting them to the Information Security Officer and/or management of my college.

I understand that I must use only those computer resources that I have the authority to use. I must not provide false or misleading information to gain access to computing resources. The VCCS may regard these actions as criminal acts and may treat them accordingly. I must not use VCCS IT resources to gain unauthorized access to computing resources of other institutions, organizations, individuals, etc.

The System Office and colleges reserve the right (with or without cause) to monitor, access and disclose all data created, sent, received, processed, or stored on VCCS systems to ensure compliance with VCCS policies and federal, state, or local regulations. College or System Office officials will have the right to review and/or confiscate (as needed) any equipment (COV owned or personal) connected to a COV-owned device or network.
I understand that it is my responsibility to read and abide by this agreement, even if I do not agree with it. If I have any questions about the VCCS Information Technology Acceptable Use Agreement, I understand that I need to contact the college Information Security Officer or appropriate college official.

CAMPUS SAFETY AND SECURITY

Freedom and Responsibility
John Tyler Community College affords you considerable freedom to develop or redefine your lifestyle. You are encouraged to get your own schedule, develop new friendships, and manage the complexities of home, classroom, and work. Faculty, staff, and other students provide a support network, but ultimately you must make your own decisions. With this freedom comes increased responsibility for your coursework, your co-curricular involvements, and the security of you and your fellow students.

Security at John Tyler Community College is the shared responsibility of students, faculty, and staff. Our institution has an excellent record of safety and security, but the campus will remain safe only if we take our responsibilities to ourselves and others seriously.

Being Safe around Campus
You can help maintain safety for everyone at JTCC by following some simple common sense tips:

1. Walk with a friend when you leave evening classes. If a companion is unavailable, stay in lighted areas and be aware of who is in your general vicinity and what is going on around you. If you feel uncomfortable or notice something that is unusual, ask one of the security officers to escort you to your car.
2. Know the people who offer you rides or invite you to visit them off campus.
3. Be aware and concerned about the use and abuse of alcohol or other drugs. Violent acts occur more often when people are under the influence of alcohol or other drugs. The College complies with the Drug-Free Schools and Communities Act in specifically discouraging violations of alcohol and drug laws. Please refer to the College policies on Substance Abuse in this handbook for additional information on these matters.
4. Do not let yourself be a threat to safety. Remember that violence is an unacceptable means to conflict resolution. Student Services personnel are always ready to help you and other students find effective, non-violent ways to resolve disagreements.
5. Take advantage of information programs offered by Campus Security and the office of the Dean of Students. Discussions on security awareness and crime prevention, substance abuse, sexual harassment, and victims’ rights are addressed in special programs and in student orientation classes. This type of information could make a difference for you or a friend in a crisis.
6. Pay attention to campus-wide memos and classroom announcements that concern a potential threat to your security. Such proclamations fortunately are rare, but they may contain information crucial to your safety.
7. Remember that the campus is accessible by foot from any direction at any time. While the nearby off-campus areas may appear relatively secure and safe, threats can arise from people and circumstances at any time and any place.

EMERGENCY QUICK REFERENCE

In the Event of an Emergency
Call 911, or call the appropriate security number below. Note: If you call 911, you must still report the incident to College Security Services. You may also contact College Security Services by using one of the emergency call boxes located in each building on the Chester and Midlothian campuses.

College Security Information
If using a campus phone, dial 9 first to get an outside line. NOTE: If your call is not immediately answered, do not hang up. The security officer may be handling other calls or may be away from the desk. If he/she is away from the desk, your call will forward to the cell phone carried by the officer.

Chester Campus
796-4025
Desk locations: Moyar Hall – 1st floor (beside M101)
Nicholas Center – inside main entrance

Midlothian Campus
897-6678
Desk locations: Administration Bldg. – atrium
Eliades Hall – 2nd floor (next to E215)
Hamel Hall – 1st floor (near H109)

JTCC Nursing Education Center
622-8730
Desk location: inside main entrance

CCWA – Featherstone
897-6678 (Midlothian Security Services)
440-2447 (Featherstone – only use on nights and weekends when classes are being held)

Power Outage and Telephone Use
If an emergency occurs that causes a power outage, campus phones may not operate. In such a case, if you need to report emergency information, the following locations have phones that will work:

Chester - Nicholas Center Security Desk
Midlothian – Administration Building Security Desk
Nursing Education Center – Reception Area

Emergency Notification
John Tyler Community College uses the following tools to notify employees, students and the public of an emergency situation: Tyler Alert, fire alarms, public address system, e-mail, employee voicemail, indoor security call boxes, electronic bulletin boards, web site (www.jtcc.edu), security staff, area emergency coordinators, Facebook, Twitter and media outlets.
Tyler Alert
Tyler Alert is one of the notification tools the College will use to alert students, faculty and staff of an emergency situation and of closings and delays due to inclement weather. Tyler Alert allows the College to send urgent text messages and e-mails to those who are registered in the system. This is a voluntary system, so if you would like to receive these messages, you must register at www.jtcc.edu/tyleralert. You may register multiple devices – such as cell phones and smart phones – as well as e-mail addresses. There is no fee to register for Tyler Alert, but your carrier may charge fees for receiving messages on your wireless device. If you need technical assistance, please call 804-706-5096 or e-mail tyleralert@jtcc.edu.

Evacuation of Building(s)
If a fire alarm sounds or you are ordered to evacuate by security, leave the building by the nearest marked exit (noted on the evacuation maps posted in each room). Do not use elevators. Unless otherwise instructed, you should proceed to the following locations:

Chester Campus
Bird Hall – Parking Lot F
Facilities – Parking Lot H
Godwin Hall – Parking Lot C
Goyne Hall – Parking Lot A
Moyar Hall – Parking Lot F
Nicholas Center – Parking Lot A
Trailers near Bird – Parking Lot F
Trailers near Nicholas – Parking Lot A

Midlothian Campus
Administration Building – Parking Lot C
Eliades Hall – Parking Lot A
Facilities – Parking lot next to Facilities building
Hamel Hall – Parking Lot D

JTCC Nursing Education Center
Front parking lot, assembling as close as possible to Johnston-Willis Drive

CCWA – Featherstone
Parking lot in front of building toward Huguenot Road

Severe Weather/Tornado Warnings
In the case of severe weather, you may be instructed to proceed to the College's severe weather shelters. Go to the shelter closest to where you are at the time of the warning.

Chester Campus
Bird Hall – B124, B132
Facilities – Moyar Hall, M114
Godwin Hall – G125, G128
Goyne Hall – Bird Hall, B124, B132
Moyar Hall – M122, M130, M134, M136
Nicholas Center – N102, N102a
Trailers near Bird – Bird Hall, B102, B104, B116
Trailers near Nicholas – Nicholas Center, N102, N102a

Midlothian Campus
Administration Building – B115b, 1st floor hallway next to Career Center
Eliades Hall – E113, E115, E117
Facilities – Restrooms
Hamel Hall – H105, H107, H109

JTCC Nursing Education Center
J114, J129, interior office behind receptionist desk

CCWA – Featherstone
F101, F108b, restrooms in suite F116

Earthquakes
If an earthquake occurs, immediately take the following steps:

If you are indoors:
• Drop to the ground.
• Take cover by getting under a sturdy desk or table.
• Hold on until the shaking stops.

If you are outdoors: Move quickly away from buildings, utility poles and other structures.

If you are in an automobile: Stop in the safest place available, preferably away from power lines and trees, and stay in your vehicle for shelter.

After the earthquake stops, College personnel will examine JTCC's facilities to determine if evacuations are needed.

Lockdown
Certain emergency situations may require the College to go on lockdown. If a lockdown is issued, you must remain in your office or classroom and lock or barricade all doors and windows. You must remain in place until an all clear is given by the incident commander or authorized College personnel.

Fire
In the case of a fire, follow these steps as you evacuate the building:

• If it can be done safely, close all windows and internal doors.
• If you are in an area filled with smoke, drop to the floor, and keep your head no more than 8 – 12 inches off the floor.
• Before opening any door, feel it for heat. Do not open doors that are hot.
• Do not use elevators.

Bomb Threat or Suspicious Device/Package Found
If you find a suspicious device/package, do not attempt to pick up the device/package. Do NOT sound the fire alarm, use 2-way radios or use cell phones as they may trigger an explosive device. Evacuate the immediate area, and report the device to the nearest security officer. Should you receive a phoned-in bomb threat, try to get as much information as possible from the caller, and immediately report the call to Security Services.

Hazardous Spill
In the event of a hazardous or suspected hazardous spill, secure the area, notify the nearest College faculty or staff member, who will then report the incident to Security Services.
Suspicious/Disruptive Person on Campus
If you have reason to believe that a person at a John Tyler facility may represent a potential danger to himself/herself or others or if you have concerns about a person or his/her behavior, please report your concerns to the Threat Assessment Team. An incident report may be found at www.jtcc.edu/tat. If the threat is immediate, call 911 or College Security Services.

Active Shooter
If an active shooter is in your vicinity, quickly determine the most reasonable way to protect your life.

1. Evacuate the area if possible.
   • Have an escape route and plan in mind before attempting to evacuate.
   • Leave your belongings behind.
   • Keep your hands visible.
2. If it is too dangerous to leave the area, hide.
   • Do not remain in an open hallway or area.
   • Hide in an area out of the shooter's view.
   • Block entry to your hiding place by barricading and/or locking the doors.
   • Silence your cell phone and/or pager.
3. Take action as a last resort and only if your life is in imminent danger.
   • Attempt to incapacitate the shooter.
   • Act with physical aggression and throw items at the active shooter.

Call 911 when it is safe to do so.

Please note, the previous information cannot cover every possible situation that might occur.

Automated External Defibrillator Locations

Chester Campus
Bird Hall – outside B120
Facilities
Godwin Hall – wall outside restrooms
Goyne Hall – outside A101
Moyar Hall – behind security desk (1st floor), outside M216 (2nd floor)
Nicholas Center – behind security desk

Midlothian Campus
Administration Building - behind security desk (1st floor), next to stairwell (2nd floor)
Eliades Hall – outside E117 (1st floor), outside E217 (2nd floor), outside E321 (3rd floor)
Facilities
Hamel Hall – outside H110 (1st floor), outside H206 (2nd floor), outside H320 (3rd floor)

JTCC Nursing Education Center
Inside main entrance

Featherstone – CCWA
Hallway in front of F115

First Aid Kits

Chester Campus
Moyar Hall – security officer’s desk
Nicholas Center – security officer’s desk

Facilities

Midlothian Campus
Administration Building – Lobby (security officer’s desk)

Key People to Contact

Security Staff
Chester Campus: Nicholas Center, 804-796-4025
Midlothian Campus: Administration Building, 804-897-6678

Security Manager
Frank Medaglia: 804-594-1414 (Midlothian) or 804-706-5017 (Chester)

Chesterfield County Police Department
Emergency: 911
Non-Emergency: 804-748-1251

POLICY ON WEAPONS

Purpose
The purpose of this policy is to promote a safe learning and working environment for all College locations by minimizing the risk of violence by use of a weapon. This policy provides rules and procedures for the possession of weapons on campus grounds, in campus buildings, and at campus events. It is consistent with the Virginia Administrative Code: 95-10-10, (http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+8VAC95-10-10) adopted by the State Board for Community Colleges, Policy 3.14.6, Workplace Violence Prevention and Threat Assessment Policy Guidelines of the Virginia Community College System, (http://www.vccs.edu/LinkClick.aspx?fileticket=le9xGSUmjtg%3d&tabid=103) and the laws and regulations of the Commonwealth of Virginia. This policy applies to all faculty, staff, students, contractors, and visitors entering campus buildings or attending College-sponsored events.

Authority
The State Board for Community Colleges is authorized by Virginia Code §§ 23-215, (http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+23-215) and 23-217(g), (http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+23-217) to promulgate regulations for carrying out its responsibilities. The Virginia Administrative Code: 95-10-10, (http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+8VAC95-10-10) adopted by the State Board for Community Colleges sets out prohibitions for weapons possession on all college campuses within the VCCS. College boards may approve policies consistent with guidelines set by the State Board for Community Colleges.

Policy
Possession or carrying of any weapon by any person, except a police officer, is prohibited on College property in academic buildings, administrative office buildings, student centers, child care centers, dining facilities and places of like kind where people congregate, or while attending any College-sponsored sporting, entertainment or educational events. Entry upon the aforementioned college property in violation of this prohibition is expressly forbidden.

Faculty, staff, and students may not possess or carry any weapon anywhere on college property except as outlined in
8VAC95-10-30 Exceptions to Prohibition, (http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+8VAC95-10-30) and those listed below.

Exceptions
Current sworn and certified local, state, and federal law enforcement officers with proper identification, may possess or carry a weapon on College property, inside all campus buildings, and at all campus events.

Faculty, staff, and students may secure handguns, rifles, and shotguns in a compartment or container of parked vehicles.

Faculty, staff, and students who wish to secure a handgun in their vehicle must possess a valid concealed handgun permit.

The compartment or container may be a trunk or other storage area. At no time shall a weapon be visible in plain view while inside a vehicle.

Visitors and contractors may secure handguns, rifles, and shotguns in parked vehicles. Visitors and contractors are encouraged to secure weapons in the trunk of vehicles or otherwise out of sight of passersby. If visitors and contractors store handguns in a parked vehicle, the handgun must be secured in a compartment or container inside the vehicle.

The College Security manager may authorize in writing for a person to possess, store, or use a weapon according to the Guideline Information below.

Procedures
If a campus security officer observes or receives a report of a violation of this policy, campus security will direct the individual to leave the campus building or event immediately. The individual may secure the weapon inside his or her vehicle and return. In the event the individual fails to comply, campus security will take appropriate action, to include contacting local police. In cases involving an immediate threat of violence, members of the campus community are encouraged to call 911 immediately. Campus security will take appropriate action, to include contacting local police.

Persons observed on the open grounds of the campus (streets, sidewalks, and other open areas on College property) may be asked by campus security to identify his or her relationship with the College to confirm whether a violation of this policy has occurred (i.e., determine whether the individual is a student, employee, or visitor). If the individual is a visitor who intends to enter a campus building or event where weapons are prohibited, campus security shall advise that, pursuant to regulation, it is unlawful to enter such places while possessing or carrying a weapon. The individual shall be advised to secure the weapon inside his or her vehicle prior to entering the building or event.

Violation of Policy
Students violating this policy will be subject to disciplinary action as outlined on page 30 and other College policies as appropriate.

Employees violating this policy may be subject to disciplinary action up to and including termination and criminal prosecution using existing policies and procedures including Section 3 of the VCCS Policy Manual, (www.vccs.edu/Portals/0/ContentAreas/PolicyManual/Sc3.pdf) or DHRM Policy 1.60, Standards of Conduct, (www.dhhrm.state.va.us/hrpolicy/web/pol1_60.pdf).

Visitors and contractors in violation of the prohibitions on the possession of weapons are subject to arrest and may be barred from the campus.

Guidelines for the Approval of Exceptions to the Prohibitions of Weapons
Pursuant to 8 Va. Admin. Code 95-10-30, the chief of the college police department or head of security department, or his designee, may authorize in writing a person to possess, store, or use a weapon: (i) when used for educational or artistic instruction, display, parade, or ceremony sponsored or approved by the college (unloaded or disabled only and with other specified safeguards, if appropriate); or (ii) for any college-approved training, course, or class.

Authorization for the above purposes shall be given in accordance with the following guidelines:

1. Authorization shall not be unreasonably withheld. In other words, there must be a specific and concrete reason(s) for denial. The reason(s) for denial must be based on a concern for the safety of the college community.

2. Colleges may require a prior written request for authorization, but such prior written request must not be unreasonably long or unduly burdensome. The advance prior written request must be necessary to promote public safety and the safe operation of the campus.

3. Reasons for denial shall be limited to: (1) a lack of sufficient safeguards for weapon(s); (2) insufficient information from the requester in order to determine whether the event, activity, or course, etc., will be carried out safely; (3) the request for the time, day, place, etc. is likely to cause unsafe or disruptive conditions (in this case, the college should allow alternative dates and times when available); (4) the program, event, or activity has not been approved by the college; and, (5) any other reason of like kind.

4. In addition to the logistical information for the event (date, time, place, etc.), colleges shall require the written request to contain the following information: (1) the written authorization from the college president or designee approving the course or event; (2) name and affiliation with college; (3) number and type(s) of weapon(s); and, (4) purpose of the event, activity, course, etc.

ON-CAMPUS STUDENT INFORMATION

Parking
Adequate parking space is provided for students. Special parking is available to handicapped individuals whose vehicles display the appropriate sticker. Applications for special parking permits should be made through Campus Security. Parking stickers are recommended for all other students and may be obtained during registration from the Business Office.

Parking violations in designated handicapped and fire lane areas or in designated faculty parking spaces will be subject to citations.

Unscheduled Closings
When severe weather or emergencies (snow, ice, power failures) require reduced operations, notification will be made on the College web site (www.jtcc.edu), on Tyler Alert,
on the College’s Facebook (www.facebook.com/johntylercc) and Twitter (www.twitter.com/johntylercc) pages, through College e-mail, and through announcements by local radio and television stations. Information also may be obtained by calling the College information number, 804-796-4000. In the absence of any announcement, the College is open.

Students are expected to exercise judgment when hazardous conditions exist in their own areas. If a student must miss a class for any reason, the instructor should be contacted as soon as possible and arrangements made for appropriate make-up work.

Telephones
Faculty/staff phones on campus are for official College business only.

Incoming Telephone Calls
In the case of an extreme emergency, such as illness or accident involving a child, spouse or parent, Security will receive the call and attempt to locate the student. No personal phone calls will be forwarded to students. Please notify family and friends of this rule.

Cellular Phones
Cell phones should be turned off before entering classrooms. The use of cell phones also is prohibited in other areas at the institution. These areas are marked. The use of cell phones in classrooms and prohibited areas is a violation of the student conduct code.

Bulletin Boards
Bulletin boards designated for student use are provided in all the College buildings. Approval for posting is granted only by the dean of students and the coordinator of student activities. Commercial notices generally are not permitted. Printed material may remain posted only for a period specified by the dean or coordinator. This period normally will not exceed one month. Materials may only be posted on bulletin boards and should not be posted to walls, glass surfaces or parked vehicles. Material that is not removed in accordance with the specified expiration date will be removed and disposed of by College personnel.

Lost & Found
At the Chester and Midlothian campuses, items that are found should be turned over to Campus Security. Efforts will be made to locate the owner, and students should report to Campus Security to reclaim lost articles.

Student Lounges
Student lounges are located on both the Chester and Midlothian campuses. On the Chester Campus, the lounge is located in the Nicholas Center; on the Midlothian Campus, the lounge is located in Hamel Hall, first floor (H106). All students are expected to conduct themselves in a manner consistent with the community standards of a postsecondary public academic institution. The code of conduct by which all students are expected to comply may be found on page 28 of this document.

Eating and Drinking in Classrooms
Students are not permitted to eat or drink in any laboratories at the institution. These include all computer labs, science labs, drafting labs, industrial labs, and engineering labs. Food and beverages also are prohibited in the College libraries. Signs are posted on the doors of all rooms and facilities in which eating and drinking are forbidden.

Students are asked to exercise great care and adhere to appropriate classroom decorum when consuming food and beverages in permissible classrooms at the institution.

Tobacco Products on Campus

Smoking, including the use of e-cigarettes and any other tobacco products, is prohibited in all College buildings and vehicles.

Smoking, including the use of e-cigarettes and any other tobacco products, is prohibited within 25 feet of College building entries, outdoor air intakes and operable windows.

Students and employees may use designated outside smoking areas. Institution-provided ash urns should be used to dispose of smoking material waste to avoid littering and limit fire hazards.

Minors on Campus
The College is not responsible for visiting minors who are left unattended. Accordingly, all parents and accompanying adults should be aware of the following policy:

John Tyler Community College disclaims any responsibility for injury to visiting minors when the injury may have been prevented by appropriate parental supervision. In order to protect both visitors and the College, the following are in effect:

a. Persons under age 18 who are enrolled students at John Tyler Community College may use the appropriate and authorized College facilities without being supervised by a parent or an accompanying adult.

b. Persons under age 18 who are not enrolled students at John Tyler Community College may use the appropriate and authorized College facilities only when supervised by a parent or an accompanying adult.

c. Parents and accompanying adults are requested to make appropriate arrangements for the supervision of minors, particularly small children, to avoid the disruption of College activities and potential injury to the child. Specifically, minor children should not be brought into classrooms during instructional periods.

d. No children will be allowed in the buildings during normal closed hours during the week or on weekends.

Recruiters on Campus
Representatives of educational institutions and the armed forces who wish to provide students with information about educational and career opportunities are welcome on both of the College’s campuses. In order to facilitate optimum student participation in recruitment activities and to avoid the disruption or obstruction of teaching or other activities of the
institution, all recruiters must request permission in advance to visit a campus from the coordinator of student activities. The coordinator reserves the right to determine the time, manner and place of such visitations. Recruiters interested in visiting campus should email studentactivities@jtcc.edu.

**Appropriate Attire**

All students and visitors are expected to dress in a manner consistent with the community standards of a postsecondary public academic institution. While it is recognized that persons have the right to dress in a manner that reflects their individual tastes and preferences, this right must be exercised in a manner that does not infringe on the rights of others to expect an environment that is conducive to learning. The institution reserves the right to prohibit clothing that is deemed offensive or demeaning and attire that poses a health or safety concern. Questions or concerns about appropriate attire should be referred to the dean of students.
### Transfer Degrees

**Associate of Science Degrees**
- Business Administration‡
- Paralegal Specialization
- Engineering‡
- General Studies‡
  - Logistics Specialization
  - Mass Communications Specialization
  - Music Specialization
  - Pre-BSN Specialization‡ (pending approval)
- Psychology Specialization
- Science Specialization
- Secondary Teacher Education Specialization in Mathematics and Science
  - Teacher Education Specialization Elementary (K-6)
- Theatre Arts Specialization
- Information Systems‡

**Associate of Arts Degree**
- Liberal Arts‡
  - Communications Specialization
  - Music Specialization
  - Secondary Teacher Education Specialization in English
  - Secondary Teacher Education Specialization in History
  - Theatre Arts Specialization

### Associate of Applied Arts Degrees

**Visual Arts**
- Film Specialization
- Photography Specialization
- Visual Communications Specialization

**Associate of Applied Science Degrees**
- Accounting
- Advanced Manufacturing Technology‡ (pending approval)
- Architectural Engineering Technology‡
- Business Management‡
- Criminal Justice‡
  - Homeland Security Specialization
- Early Childhood Development
  - Teacher Assistant Specialization
- Electrical Engineering Technology‡ (pending approval)
- Emergency Medical Services - Paramedic‡ (pending approval)
- Funeral Services‡
- Human Services
  - Criminology Specialization
  - Pre-Social Work Specialization
- Information Technology‡
  - Cisco Network Track‡
  - Computer Applications Track‡
  - Cyber Security Track‡
  - Network Support Track‡
  - Program Development Track‡
- Mechanical Engineering Technology‡
  - Mechatronics Technician Specialization
- Nursing‡
  - Traditional Track‡
  - Hybrid Distance Education Track‡
- Technical Studies‡
  - Heating, Ventilation and Air Conditioning Track‡
  - Industrial Electricity Track‡
  - Mechanical Maintenance Track‡
  - Precision Machining Computer Numerical Control (CNC) Track‡
  - Precision Machining Technology Track‡
  - Residential Electricity Track‡
  - Welding Track‡

### Certificates

**Building Construction**
**Child Care**
**Fine Arts**
**General Education*\**
**Precision Machining Technology‡**
**Welding‡**

### Career Studies Certificates

**Accounting**
**Adult Home Administration**
**Advanced Manufacturing Management*‡ (pending approval)**
**Allied Health Preparation, Pre-Funeral Services**
**Allied Health Preparation, Pre-Nursing‡**
**Athletic Coaching**
**Basic Precision Machining Technology*‡**
**Bereavement and Grief Counseling**
**Business Entrepreneurship**
**Business Information Management‡**
**Child Care Management**
**Cisco Network‡**
**Computer-Aided Drafting and Modeling*‡**
**Computer Applications‡**
**Computer Numerical Control*‡**
**Criminal Justice‡**
**Cyber Security‡**
**Early Childhood*†**
**Electricity*†**
**Emergency Medical Services**
  - Advanced Emergency Medical Technician‡
**Emergency Medical Services**
  - Intermediate‡
**Filmmaking* (pending approval)**
**Geographic Information Systems*‡**
**Heating and Air Conditioning‡**
**Human Services Administration and Supervision**
**Industrial Electricity‡**
**Mechanical Maintenance‡**
**Museum Studies*‡**
**Network Support‡**
**Paralegal Studies**
**Photography* (pending approval)**
**Program Development‡**
**Residential Electricity‡**
**Substance Abuse Assistant Supervision‡**
**Surveying*‡**
**Web Design**
**Welding†**

* Programs not currently eligible for financial aid
‡ Programs related to science, technology, engineering, mathematics and health (STEM-H)
*‡ Programs available completely online

For more information, go to www.jtcc.edu/academics.
**MAJORS**

**ACCOUNTING, BUSINESS & PARALEGAL**
- Accounting AAS
- Accrediting CSC
- Business Administration‡ AS
- Business Administration Paralegal Specialization AS
- Business Entrepreneurship CSC
- Business Information Management‡ CSC
- Business Management‡ AAS
- General Studies Logistics Specialization AS
- Paralegal Studies CSC
- Supervision‡ CSC

**ADVANCED MANUFACTURING**
- Advanced Manufacturing Management‡ CSC (pending approval)
- Advanced Manufacturing Technology‡ AAS (pending approval)
- Basic Precision Machining Technology† CSC
- Computer-Aided Drafting and Modeling† CSC
- Computer Numerical Control† CSC
- Electrical Engineering Technology† AAS (pending approval)
- Engineering† AS
- Industrial Electricity† CSC
- Mechanical Engineering Technology† AAS
- Mechanical Engineering Technology Mechatronics Technician Specialization† AAS
- Mechanical Maintenance† CSC
- Precision Machining Technology† Certificate

**ARTS & HUMANITIES**
- Filmmaking† CSC (pending approval)
- Fine Arts Certificate
- General Education* Certificate
- General Studies‡ AS
- General Studies Mass Communications Specialization AS
- General Studies Music Specialization AS
- General Studies Psychology Specialization AS
- General Studies Theatre Arts Specialization AS
- Liberal Arts‡ AA
- Liberal Arts Communications Specialization AA
- Liberal Arts Music Specialization AA
- Liberal Arts Secondary Teacher Education Specialization in English AA
- Liberal Arts Secondary Teacher Education Specialization in History AA
- Liberal Arts Theatre Arts Specialization AA
- Museum Studies‡ CSC
- Photography‡ CSC (pending approval)
- Visual Arts AAA
- Visual Arts Film Specialization AAA
- Visual Arts Photography Specialization AAA
- Visual Arts Visual Communications Specialization AAA
- Web Design CSC

**COMPUTERS AND TECHNOLOGY**
- Business Information Management‡ CSC
- Cisco Network† CSC
- Computer-Aided Drafting and Modeling† AAS
- Computer Applications‡ CSC
- Computer Numerical Control‡ CSC
- Cyber Security‡ CSC
- Information Systems‡ AS
- Information Technology‡ AAS
  - Cisco Network Track†
  - Computer Applications Track†
  - Cyber Security Track†
  - Network Support Track†
  - Program Development Track†
- Network Support† CSC
- Program Development† CSC
- Web Design CSC

**CRIMINAL JUSTICE & SOCIAL WORK**
- Adult Home Administration CSC
- Bereavement and Grief Counseling CSC
- Criminal Justice‡ AAS
- Criminal Justice‡ CSC
- Criminal Justice Homeland Security Specialization AAS
- Human Services AAS
- Human Services Administration and Supervision CSC
- Human Services Criminology Specialization AAS
- Human Services Pre-Social Work Specialization AAS
- Substance Abuse Assistant CSC

**EDUCATION**
- Child Care Certificate
- Child Care Management CSC
- Early Childhood‡ CSC
- Early Childhood Development AAS
- Early Childhood Development Teacher Assistant Specialization AAS
- General Studies Second Year Education Specialization in Mathematics and Science‡ AS
- General Studies Teacher Education Specialization Elementary (K-6) AS
- Liberal Arts Secondary Teacher Education Specialization in English AA
- Liberal Arts Secondary Teacher Education Specialization in History AA

**ENGINEERING**
- Architectural Engineering Technology‡ AAS
- Electrical Engineering Technology‡ AAS
- Engineering‡ AS
- Mechanical Engineering Technology‡ AAS
- Mechanical Engineering Technology Mechatronics Technician Specialization‡ AAS

**SCIENCE & HEALTH SCIENCES**
- Allied Health Preparation, Pre-Funeral Services‡ CSC
- Allied Health Preparation, Pre-Nursing‡ CSC
- Athletic Coaching CSC
- Emergency Medical Services – Advanced Emergency Medical Technician‡ CSC
- Emergency Medical Services – Intermediate‡ CSC
- Emergency Medical Services - Paramedic‡ AAS (pending approval)
- Funeral Services‡ AAS
- General Studies – Pre-BSN Specialization‡ AS (pending approval)
- General Studies – Science Specialization‡ AS
- Nursing‡ AAS
  - Traditional Track‡
  - Hybrid Distance Education Track‡

**SKILLED TRADES**
(See also Advanced Manufacturing.)
- Building Construction Certificate
- Electricity† CSC
- Geographic Information Systems† CSC
- Heating and Air Conditioning† CSC
- Residential Electricity† CSC
- Surveying† CSC
- Technical Studies† AAS
  - Heating, Ventilation and Air Conditioning Track†
  - Industrial Electricity Track†
  - Mechanical Maintenance Track†
  - Precision Machining Computer Numerical Control (CNC) Track†
  - Precision Machining Technology Track†
  - Residential Electricity Track†
  - Welding Track†
- Welding† Certificate
- Welding‡ CSC

For more information, go to [www.jtcc.edu/academics](http://www.jtcc.edu/academics).

AMS= Associate of Arts Degree
AAS = Associate of Applied Arts Degree
AAS = Associate of Applied Science Degree
AS = Associate of Science Degree
CSC = Career Studies Certificate
* Programs not currently eligible for financial aid
† Programs related to science, technology, engineering, mathematics and health
(STEM-H)
‡ Programs available completely online
Transfer Degrees

This section provides a listing of John Tyler Community College’s transfer degree programs. The College’s programs are subject to change. For an updated list, please visit the College’s web site at www.jtcc.edu/academics.
Business Administration

Associate of Science Degree (A.S.)

Purpose
The associate of science curriculum in business administration is designed for students who plan to transfer to four-year colleges or universities and seek bachelor’s degrees in fields such as accounting, business management, international business, economics, marketing, finance or related fields.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>College Composition I</td>
</tr>
<tr>
<td>ITE 115</td>
<td>3</td>
<td>Introduction to Computer Applications and Concepts</td>
</tr>
<tr>
<td>MTH 163</td>
<td>3</td>
<td>Precalculus I</td>
</tr>
<tr>
<td>SDV 100</td>
<td>1</td>
<td>College Success Skills</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 112</td>
<td>3</td>
<td>College Composition II</td>
</tr>
<tr>
<td>MTH 270</td>
<td>3</td>
<td>Applied Calculus</td>
</tr>
<tr>
<td>History or Political Science Elective</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 211</td>
<td>3</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ECO 201</td>
<td>3</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>4th</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 212</td>
<td>3</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>BUS 100</td>
<td>3</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>CST 100</td>
<td>3</td>
<td>Principles of Public Speaking or CST 110 Introduction to Communication</td>
</tr>
<tr>
<td>ECO 202</td>
<td>3</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total Credits For Program</td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

Notes and Additional Curriculum Options
1. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100), and SOC.
2. Degree requirements include a conceptual humanities course (i.e., literature, philosophy, religion) that offers breadth of knowledge, therefore the elective requirement may be satisfied by completing an approved conceptual humanities course. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
3. Students with good computer skills may seek to satisfy this requirement by CLEP.
4. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, PHY 242.
5. The history/political science elective requirement can be satisfied by the following courses: PLS 135, PLS 211, PLS 212, PLS 241, HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122, or any other HIS course approved by the student’s advisor and dean.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
**Business Administration, Paralegal Studies Specialization**

**Associate of Science (A.S.)**

**Purpose**
This program is intended to provide the student with a general course of study in paralegal studies at the freshman and sophomore levels and to prepare the student for a baccalaureate degree program in paralegal studies at select colleges and universities.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Keyboarding skills are recommended.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>LGL 110 Introduction to Law and the Legal Assistant</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 163 Precalculus I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 212 Principles of Accounting II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LGL 125 Legal Research</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 164 Precalculus II or MTH 270 Applied Calculus</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101 General Biology I</td>
<td>4</td>
<td>CHM 111, PHY 201</td>
</tr>
<tr>
<td>LGL 126 Legal Writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LGL Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Psychology or Sociology Elective</td>
<td>3</td>
<td>PSY 126. See Note 1.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 102 General Biology II</td>
<td>4</td>
<td>CHM 112, PHY 202</td>
</tr>
<tr>
<td>BUS 100 Introduction to Business</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CST 100 Principles of Public Speaking or CST 110 Introduction to Communication</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** | **61** |

**Notes and Additional Curriculum Options**
1. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY (except PSY 100), or SOC.
2. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See www.jtcc.edu/humanitieselectives for a list of approved conceptual and applied humanities electives.
3. Students should consult their faculty advisors regarding appropriate course sequences.
4. Students with good computer skills may seek to satisfy this requirement by CLEP.

For additional information on this program, please contact the Division of Engineering, Business, and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Engineering
Associate of Science (A.S.)

Purpose
The associate of science curriculum in engineering is designed for students who plan to transfer to four-year colleges or universities to complete baccalaureate degree programs in engineering.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

1st Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 111 College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>EGR 120 Introduction to Engineering</td>
<td>2</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTH 173 Calculus with Analytical Geometry I</td>
<td>5</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 18

2nd Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 124 Introduction to Engineering and Engineering Methods or CHM 112 College Chemistry II</td>
<td>3-4</td>
</tr>
<tr>
<td>EGR 126 Computer Programming for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>EGR 140 Engineering Mechanics-Statics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MTH 174 Calculus with Analytical Geometry II</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Credits 17-18

3rd Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 246 Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>EGR 248 Thermodynamics for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>HLT/PED Health or Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>MTH 277 Vector Calculus</td>
<td>4</td>
</tr>
<tr>
<td>PHY 241 General University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 18

4th Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 245 Engineering Mechanics - Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MTH 279 Ordinary Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHY 242 General University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 17

Total Credits For Program 70-71

Notes and Additional Curriculum Options
1. MTH 163 is the co-requisite for EGR 120.
2. MTH 173 is the prerequisite for EGR 140.
3. EGR 140 and MTH 174 are prerequisites for EGR 246.
4. EGR 140, MTH 174, and PHY 241 are prerequisites for EGR 245.
5. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HPS, HIS, PSY (except PSY 100), and SOC.
6. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
7. Students are encouraged to consult their faculty advisors or transfer colleges for advice regarding the selection of electives and other requirements specific to the engineering programs at the institutions where they plan to transfer.
8. Transfer Articulation Agreement with the School of Engineering and Applied Sciences at the University of Virginia. Graduates of this program with 3.5 GPAs will meet the transfer requirements to U. Va. and may pursue their bachelor degrees in engineering by taking on-site and distance education courses from U. Va. offered at John Tyler Community College’s campuses or attending classes in Charlottesville. JTCC graduates with GPAs of less than 3.4 may seek admission to the U. Va. portion of the program in the same manner as all other students wishing to enter U. Va. degree programs. Other transfer agreements for Engineering are available at www.jtcc.edu/transfer.

For additional information on this program, please contact the Division of Engineering, Business and Public Services at 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
General Studies

Associate of Science (A.S.)

Purpose
This program is intended to provide students with a general course of study that parallels the freshman and sophomore years at most colleges and universities. The courses in this program are specifically selected for ease of transfer to most four-year colleges and universities. Following the prescribed coursework in this program will result in graduation with the associate of science degree (A.S.). Students should consult with their advisors to ensure that they select general electives that best prepare them for the specific requirements of their intended transfer college or university programs of study.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
<td>MTH 164, MTH 170, MTH 173. See Note 1.</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 7.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 158, MTH 164, MTH 170, MTH 173. See Note 1.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 7.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td><strong>3rd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td><strong>4th Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>61</strong></td>
<td></td>
</tr>
</tbody>
</table>

Notes and Additional Curriculum Options
1. Students may elect to take MTH 158 and MTH 240 or MTH 163 and MTH 240 as minimum preparation for transfer.
2. Students in the science, technology, engineering, and mathematics (STEM) track should take two math classes, MTH 163 and higher, and consult with their advisor.
3. The social/behavioral sciences elective requirements can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100) and SOC.
4. Degree requirements include a conceptual humanities course (i.e., literature, philosophy, religion) that offers breadth of knowledge, therefore the elective requirement may be satisfied by completing an approved conceptual or applied humanities course. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
5. The literature requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
6. The laboratory science requirements can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, and PHY 242. STEM track majors should take CHM 111-112 plus PHY 201-202 or (PHY 241-242).
7. Students with good computer skills may seek to satisfy this requirement by CLEP.
8. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student’s advisor and dean.

For additional information on this program, please contact the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).
General Studies, Logistics Specialization

Associate of Science (A.S.)

Purpose
This program is intended to provide the student with a general course of study that parallels the freshman and sophomore years at most colleges and universities. The courses in this program are specifically selected for ease of transfer to most four-year colleges and universities. Following the prescribed coursework in this program will result in graduation with the associate of science degree (A.S.). Students should consult with their advisors to ensure that they select general electives that best prepare them for the specific requirements for their intended transfer college or university programs of study.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 116 Applied Technology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>MTH 163 Precalculus I</td>
<td>3</td>
<td>MTH 164, MTH 170, MTH 173.</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON 100 Shaping Business Arrangements</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>BUS 208 Quality and Productivity Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 270 Applied Calculus</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>CST 100 Principles of Public Speaking or CST 110 Introduction to Communications</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BUS 234 Supply Chain Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**  **61**

Notes and Additional Curriculum Options
1. Students who plan to transfer to Virginia State University to pursue a Logistics degree should enroll in a U.S. History course to satisfy this requirement.
2. The literature elective requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
3. The social/behavioral sciences elective requirements can be satisfied by courses with the following prefixes: ECO, GEO, ECO, HIS, PSY, and SOC. Students transferring to Virginia State University should complete ECO 202 and a global studies course (World Geography, World Government, Political Science (International), or World History).
4. Degree requirements include a conceptual humanities course (i.e., literature, philosophy, religion) that offers breadth of knowledge, therefore the elective requirement may be satisfied by completing an approved conceptual or applied humanities course. See website (http://www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives. Students who plan to transfer to VSU should enroll in a Philosophy elective.
5. The laboratory science requirements can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 103, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, and PHY 242. STEM track majors should take CHM 111-112 plus PHY 201-202 (or PHY 241-242). Students who plan to transfer to VSU should enroll in PHY 201-202.
6. Students should select a suitable transfer elective by consulting a faculty advisor and the transfer institution. www.jtcc.edu/transfer electives. Students who plan to transfer to VSU should enroll in ACC 211 and ITE 115 to satisfy Transfer Elective requirements.

For additional information on this program, please contact the Division of Engineering, Business and Public Services at 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
# General Studies, Mass Communications Specialization

## Associate of Science (A.S.)

### Purpose
The associate of science curriculum in general studies with a specialization in mass communications is designed for students who plan to transfer to four-year colleges or universities and seek a bachelor's degree in communications with a focus on media, advertising, or public relations. This program is intended to provide students with a general course of study that parallels the freshman and sophomore years at most colleges and universities. The courses in this program are specifically selected for ease of transfer to most four-year colleges and universities. Following the prescribed coursework in this program will result in graduation with the associate of science degree (A.S.). Students should consult with their advisors to ensure that they select general electives that best prepare them for the specific requirements of their intended transfer college or university programs of study.

### Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

### Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CST 100 Principles of Public Speaking or CST 110 Introduction to Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
<td>MTH 164, MTH 170, MTH 173. See Note 2.</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CST 114 Survey of Mass Media</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 158, MTH 164, MTH 170, MTH 173. See Note 2.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT 221 Public Relations</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHI 220 Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a> and Note 5.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 7.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a> and Note 5.</td>
</tr>
<tr>
<td>Communication Studies and Theatre Elective</td>
<td>3</td>
<td>See Note 8.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits for Program** | 61 |

### Notes and Additional Curriculum Options
1. Students with good computer skills may seek to satisfy this requirement by CLEP.
2. Students may elect to take MTH 158 and MTH 240 or MTH 163 and MTH 240 as minimum preparation for transfer. Students seeking transfer to VCU School of Mass Communications should take MTH 240.
3. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student’s advisor. Students seeking transfer to VCU School of Mass Communications should take HIS 121 and HIS 122.
4. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100) and SOC. Students seeking transfer to VCU School of Mass Communications should take ECO 120 and PLS 155.
5. Students should meet with academic advisors to determine best options for transfer and check with intended transfer institution(s) regarding foreign language requirements. Students seeking transfer to VCU should take ENG 210.
6. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, and PHY 242.
7. The literature requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
8. Students should meet with academic advisors to discuss options.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
General Studies, Music Specialization
Associate of Science (A.S.)

Purpose
The associate of science curriculum in general studies with a specialization in music is designed for students who plan to transfer to four-year colleges or universities and seek a bachelor’s degree in music or music education. This program is intended to provide students with a general course of study that parallels the freshman and sophomore years at most colleges and universities. The courses in this program are specifically selected for ease of transfer to most four-year colleges and universities. Following the prescribed coursework in this program will result in graduation with the associate of science degree (A.S.). Students should consult with their advisors to ensure that they select general electives that best prepare them for the specific requirements of their intended transfer college or university programs of study.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 101 Basic Musicianship I or MUS 111 Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>SDV 101 Orientation To Visual &amp; Performing Arts Programs</td>
<td>1</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits:** 16

2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MUS 102 Basic Musicianship II or MUS 112 Music Theory II</td>
<td>3</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits:** 15

3rd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer Elective</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
</tr>
<tr>
<td>MUS 221 History of Music I</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits:** 16

4th Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer Elective</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
</tr>
<tr>
<td>Music Elective</td>
<td>3</td>
</tr>
<tr>
<td>Music Elective</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Credits:** 13

**Total Credits For Program:** 60

Notes and Additional Curriculum Options
1. Students with good computer skills may seek to satisfy this requirement by CLEP.
2. Students may elect to take MTH 158 and MTH 240 or MTH 163 and MTH 240 as minimum preparation for transfer.
3. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student’s advisor.
4. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100) and SOC. Students interested in pursuing a degree in music education should take PSY 230.
5. Students should check with intended transfer institution(s) regarding foreign language requirements.
6. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, and PHY 242.
7. The literature requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
8. The music elective requirements must include 2 credits of applied music.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
General Studies, Pre-BSN Specialization

Associate of Science (A.S.)

Program Requirements and Special Conditions

Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. Students planning on completing a BSN should meet with their faculty advisor to decide on the courses that best match the requirements of their intended transfer institution. Where only one standard course option is listed, that course is required by the majority of BSN programs.

Program Curriculum

1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 158 College Algebra</td>
<td>3</td>
<td>MTH 163, MTH 170</td>
</tr>
<tr>
<td>BIO 141 Anatomy &amp; Physiology I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Information Technology elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PSY 230 Developmental Psychology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 157</td>
</tr>
<tr>
<td>BIO 142 Anatomy and Physiology II</td>
<td>4</td>
<td>SOC 200</td>
</tr>
<tr>
<td>Social/Behavioral science elective</td>
<td>3</td>
<td>PSY 200</td>
</tr>
<tr>
<td>Transfer elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

3rd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory science elective</td>
<td>4</td>
<td>CHM 101</td>
</tr>
<tr>
<td>HLT 230 Nutrition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Humanities elective</td>
<td>3</td>
<td>PHI 101 or PHI 220</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

4th Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>CHM 102 or BIO 101</td>
</tr>
<tr>
<td>Humanities elective</td>
<td>3</td>
<td>ART 101 or ART 102</td>
</tr>
<tr>
<td>Transfer elective</td>
<td>4</td>
<td>BIO 150</td>
</tr>
<tr>
<td>Transfer elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 61

Notes and Additional Curriculum Options

1. The literature requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
2. The history elective requirement can be satisfied with HIS 101, HIS 102, HIS 111, HIS 112, HIS 122 or any other course approved by the student’s advisor and Dean.

For additional information on this program, please contact the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).
General Studies, Psychology Specialization

Associate of Science (A.S.)

Purpose
This program is intended to provide students with a general course of study that parallels the freshman and sophomore years at most colleges and universities for degrees in psychology and related disciplines. The courses in this program are specifically selected for ease of transfer to most four-year colleges and universities. Following the prescribed coursework in this program will result in graduation with the associate of science degree (A.S.). Students should consult with their advisors to ensure that they select general electives that best prepare them for the specific requirements for their intended transfer college or university programs of study.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
<td>MTH 170, MTH 173. See Note 2.</td>
</tr>
<tr>
<td>PSY 200 Principles of Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 164, MTH 174. See Note 2.</td>
</tr>
<tr>
<td>PSY 230 Developmental Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 213 Statistics for Behavioral Sciences</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Psychology Elective</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 7.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 8.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PSY 225 Theories of Personality</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** | **61**

Notes and Additional Curriculum Options
1. Students with good computer skills may seek to satisfy this requirement by CLEP.
2. Students may elect to take MTH 158 and MTH 240 or MTH 163 and MTH 240 as minimum preparation for transfer. Students in the science, technology, engineering, and mathematics (STEM) track should take MTH 163, MTH 164, and MTH 173 to transfer.
3. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student's advisor.
4. Degree requirements include a conceptual humanities course (i.e., literature, philosophy, religion) that offers breadth of knowledge, therefore the elective requirement may be satisfied by completing an approved conceptual or applied humanities course. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
5. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, and PHY 242. Students seeking to transfer to VCU and major in Psychology should take BIO 101.
6. Students should consult with their advisors regarding appropriate psychology (PSY) electives (PSY 100 will not count for this requirement).
7. The social/behavioral science elective can be satisfied with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100) and SOC.
8. The literature requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-584-1509 (Midlothian).
### General Studies, Science Specialization

#### Associate of Science (A.S.)

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 111 College Chemistry I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Math Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits** 14

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101 General Biology I</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>PHY 201 General College Physics I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHY 241 University Physics I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHM 112 College Chemistry II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Math Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits** 15

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 102 General Biology II</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>PHY 202 General College Physics II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHY 242 University Physics II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Laboratory Science or Advanced Math Elective</td>
<td>4</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>2</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
</tbody>
</table>

**Total Credits** 16

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Science or Advanced Math Elective</td>
<td>4</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits** 16

**Total Credits For Program** 61

### Notes and Additional Curriculum Options

1. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student’s advisor.

2. Science students must complete two of the following math courses: MTH 163, MTH 164, MTH 166, MTH 173, MTH 174, MTH 240, MTH 270, MTH 277, MTH 279. Please note that students cannot receive credit for both MTH 166 and MTH 163/MTH 164. MTH 173 and MTH 174 are recommended for chemistry and physics majors. Biology majors should consult with their intended transfer institution and their advisor to choose the most appropriate math courses.

3. Students must complete one of the following lab sequences: BIO 101/102, PHY 201/202, or PHY 241/242. In general, biology majors should choose BIO 101/102. Upon approval of the Division Dean, a student may be able to take PHY 110 and PHY 120 to fulfill this requirement. Physics majors should complete PHY 241/242. Students cannot count both BIO 101/102 and BIO 110/120 toward their degree.

4. Science students need 8 credits of science/advanced math electives and may choose from the following courses: BIO 101, BIO 102, BIO 170, BIO 206, BIO 253, BIO 256, CHM 241, CHM 242, CHM 245, CHM 246, PHY 201, PHY 202, PHY 241, PHY 242, MTH 173, MTH 174, MTH 177, MTH 240, MTH 277, MTH 279. Please note that students cannot count both PHY 201/202 and PHY 241/242 toward their degree. Please note that many of the listed courses have prerequisites. Students intending to major in environmental science should consult with their advisor and transfer institution on whether ENV 121 and ENV 122 may be appropriate courses for them. Physics majors should consider choosing the advanced math electives from the list above. With permission from the Division of Mathematics, Natural and Health Sciences, students intending to major in certain health science majors such as Clinical Laboratory Science, Dental Hygiene, Radiation Science, Occupational Therapy, or Exercise Science may use BIO 141/BIO 142 to count as a science electives. BIO 150 may also be used as a science elective for Health Science majors. Please check with your advisor to plan out your classes.

5. The social-behavioral science elective can be satisfied with the following prefixes: PSY (except PSY 100), SOC, ECO, GEO, PLS, and HIS.

6. The literature requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.

7. Degree requirements include a conceptual humanities course (i.e., literature, philosophy, religion) that offers breadth of knowledge, therefore the elective requirement may be satisfied by completing an approved conceptual or applied humanities course. See website (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.

For additional information on this program, please contact the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).
General Studies, Secondary Teacher Education Specialization in Mathematics and Science
Associate of Science (A.S.)

**Purpose**
This program is specifically designed for students who plan to transfer into a science or math major at most four-year colleges and plan to teach in mathematics and science at the secondary level. Following the prescribed coursework in this program will result in graduation with the Associate in Science Degree (A.S.) in General Studies with a Specialization in Secondary Teacher Education in Science or Math. Students who complete this program will be required to pass the PRAXIS I for acceptance into teacher education programs at senior institutions. Students should consult with their advisors to ensure that they select courses that best prepare them for the specific requirements of their intended transfer college or university for majors in biology, chemistry, physics, or math. Specific secondary teacher education requirements vary at senior institutions, however, and students should consult with senior institutions for additional guidance regarding electives for pre-teacher preparation.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHM 111 College Chemistry I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>MTH 173 Calculus with Analytical Geometry I</td>
<td>5</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>SDV 101 Orientation to Teaching</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>2nd Semester</strong></th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 112 College Chemistry II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 174. See Note 2.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>3rd Semester</strong></th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 200 Introduction to Teaching as a Profession</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Lab Science or Mathematics Elective</td>
<td>4</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHY 201 General College Physics I</td>
<td>4</td>
<td>BIO 101, BIO 110, PHY 241. See Note 5.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>4th Semester</strong></th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 8.</td>
</tr>
<tr>
<td>Lab Science or Mathematics Elective</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>PHY 202 General College Physics II</td>
<td>4</td>
<td>BIO 102, BIO 120, PHY 242. See Note 5.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 61

**Notes and Additional Curriculum Options**
1. It is recommended that the history elective include American history and world history. Students should consult with prospective four-year institutions.
2. Students may be required to take MTH 164 or MTH 166 as prerequisites for MTH 173. MTH 173 and MTH 240 are recommended for biology majors. MTH 173 and MTH 174 are recommended for math, chemistry, and physics majors.
3. Acceptable electives include MTH 277, BIO 256, BIO 279, GOL 105, NAS 125 and PHY 150.
4. The literature requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
6. The social/behavioral sciences electives can be satisfied by courses with the following prefixes: PSY (except PSY 100), SOC, ECO, GEO, PLS and HIS.
7. It is recommended that students consult their prospective four-year transfer institution when selecting electives.
8. Degree requirements include a conceptual humanities course (i.e., literature, philosophy, religion) that offers breadth of knowledge, therefore the elective requirement may be satisfied by completing an approved conceptual or applied humanities course. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.

For additional information on this program, please contact the Division of Engineering, Business, and Public Services: 804-706-5121 (Chester Campus) or 804-594-1480 (Midlothian Campus).
General Studies, Teacher Education Specialization - Elementary (K-6)

Associate of Science (A.S.)

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIS 121 United States History I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>ITE 200. See Note 1.</td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>SDV 101 Orientation to Future Teachers</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>1</td>
<td>HLT 116, PED 116</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

| **2nd Semester** |         |                         |
| ART 101 History and Appreciation of Art | 3 | ART 102, MUS 121, MUS 122 |
| ENG 112 College Composition II | 3 |                         |
| HIS 122 United States History II | 3 | See Note 3. |
| MTH 240 Statistics | 3 | MTH 164 |
| PLS 135 American National Politics | 3 |                         |
| **Total Credits** | **15** |                         |

| **3rd Semester** |         |                         |
| CST 100 Introduction to Public Speaking | 3 |                         |
| ECO 201 Principles of Macroeconomics | 3 | See Note 4. |
| EDU 200 Introduction to Teaching as a Profession | 3 |                         |
| HIS 112 History of World Civilization II | 3 | HIS 102, HIS 111. See Note 3. |
| PHY 101 Introduction to Physics I | 4 | See Note 5. |
| **Total Credits** | **16** |                         |

| **4th Semester** |         |                         |
| BIO 101 General Biology I | 4 | See Note 5. |
| ENG 241 Survey of American Literature I | 3 | ENG 242, ENG 243, ENG 244, ENG 251, ENG 252 |
| GEO 210 People and the Land: Cultural Geography | 3 |                         |
| Social/Behavioral Science Elective | 3 | See Note 7. |
| Humanities Elective | 3 | REL 230, REL 237. See Note 6. |
| **Total Credits** | **16** |                         |

| **Total Credits For Program** | **61** |                         |

Notes and Additional Curriculum Options
1. Students transferring to Virginia State University should take ITE 200. The computer literacy requirement also can be satisfied by other information technology courses and CLEP examinations.
2. Students may elect to take MTH 158 and MTH 240 or MTH 163 and MTH 240 as minimum preparation for transfer. Students in the science, technology, engineering, and mathematics (STEM) track should take MTH 163, MTH 164, and MTH 173 to transfer.
3. It is recommended that the HIS requirement include American history and world history. Students should consult with prospective four-year institutions.
4. ECO 120 may be used as a standard course option for some colleges and universities. Please consult with your transfer institution.
5. Two different science disciplines are recommended and are even required at some transfer institutions.
6. Some transfer institutions require foreign language, some do not. Degree requirements include a conceptual humanities course (i.e., literature, philosophy, religion) that offers breadth of knowledge, therefore the elective requirement may be satisfied by completing an approved conceptual or applied humanities course. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
7. The social/behavioral sciences elective requirements can be satisfied by courses with the following prefixes: PSY (except PSY 100), SOC, ECO, GEO, PLS and HIS.

For additional information on this program, please contact the Division of Engineering, Business and Public Services at 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
# General Studies, Theatre Arts Specialization

**Associate of Science (A.S.)**

## Purpose
The associate of science curriculum in general studies with a specialization in theatre arts is designed for students who plan to transfer to four-year colleges or universities and seek a bachelor’s degree in theatre. This program is intended to provide students with a general course of study that parallels the freshman and sophomore years at most colleges and universities. The courses in this program are specifically selected for ease of transfer to most four-year colleges and universities. Following the prescribed coursework in this program will result in graduation with the associate of science degree (A.S.). Students should consult with their advisors to ensure that they select general electives that best prepare them for the specific requirements of their intended transfer college or university programs of study.

## Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

### Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CST 131 Acting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
<td>MTH 164, MTH 170, MTH 173. See Note 2.</td>
</tr>
<tr>
<td>SDV 101 Orientation to Visual &amp; Performing Arts Programs</td>
<td>1</td>
<td>SDV 100 College Success Skills</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CST 132 Acting II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 158, MTH 164, MTH 170, MTH 173. See Note 2.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>3rd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CST 160 Improvisation I</td>
<td>3</td>
<td>CST 140</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a> and Note 5.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 7.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>4th Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CST 136 Theatre Workshop</td>
<td>3</td>
<td>CST 145, CST 252</td>
</tr>
<tr>
<td>CST 210 Theatre Aesthetics</td>
<td>3</td>
<td>CST 130, CST 231, CST 232</td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a> and Note 5.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

### Notes and Additional Curriculum Options
1. Students with good computer skills may seek to satisfy this requirement by CLEP.
2. Students may elect to take MTH 158 and MTH 240 or MTH 163 and MTH 240 as minimum preparation for transfer.
3. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student’s advisor.
4. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100) and SOC. Students interested in pursuing a degree in theatre education should take PSY 230.
5. Students should check with intended transfer institution(s) regarding foreign language requirements.
6. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, and PHY 242. STEM track majors should take CHM 111-112 plus PHY 201-202 (or PHY 241-242).
7. The literature requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
**Information Systems**

Associate of Science (A.S.)

**Purpose**
This program is intended to provide the student with a general course of study that parallels the freshman and sophomore years at most colleges and universities and prepares the student for a baccalaureate degree program in information systems, management information systems, information technology, or business.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

### Program Curriculum

#### 1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MTH 163 Precalculus I</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>14</td>
</tr>
</tbody>
</table>

#### 2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 212 Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ITN 101 Introduction to Network Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ITP 100 Software Design</td>
<td>3</td>
</tr>
<tr>
<td>MTH 164 Precalculus II</td>
<td>3</td>
</tr>
<tr>
<td>MTH 270</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
</tr>
</tbody>
</table>

#### 3rd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101 General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>ITD 130 Database Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ITP 251 Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>PSY 126 Psychology for Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>16</td>
</tr>
</tbody>
</table>

#### 4th Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 102 General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BUS 100 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>CST 110 Introduction to Communication</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>16</td>
</tr>
</tbody>
</table>

**Total Credits For Program**
61

**Notes and Additional Curriculum Options**
1. All information technology courses must be completed within five years of a student’s intended graduation date.
2. Students should consult their faculty advisors regarding appropriate course sequences.
3. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY (except PSY 100) or SOC.
4. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
5. There may be other possible course options in mathematics and natural sciences. Students should consult their faculty advisors.
6. Students with good computer skills may seek to satisfy this requirement by CLEP.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Liberal Arts

Associate of Arts (A.A.)

Purpose
The associate of arts curriculum in liberal arts is designed for students who plan to transfer to four-year colleges or universities and seek bachelor’s degrees in fields such as English, history, philosophy, political science, archaeology, art history, foreign languages, religious studies and other majors that require foreign language as part of their general education requirements.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 7.</td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
<td>MTH 170, MTH 173</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Foreign Language (101)</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 164, MTH 270, MTH 174</td>
</tr>
<tr>
<td>Foreign Language (102)</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Language (201)</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 8.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>Philosophy/Religion Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Language (202)</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 8.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Transfer Elective</td>
<td>3</td>
<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a>.</td>
</tr>
<tr>
<td>Visual &amp; Performing Art Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

| **Total Credits For Program** | 60 | |

Notes and Additional Curriculum Options
1. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY (except PSY 100) and SOC.
2. The philosophy/religion elective requirement can be satisfied by courses with the following prefixes: PHI and REL.
3. The visual and performing arts elective can be satisfied by any ART or MUS course or any CST acting or theatre course to include CST 130, CST 131, CST 132, CST 136, CST 195, CST 231 and CST 232.
4. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student’s advisor and dean.
5. Students must demonstrate competency in a foreign language through the 202 level by completing appropriate courses and/or examinations. Placement in foreign language is by SAT II Subject Test score or departmental recommendation. Students who are not required to take introductory-level courses must substitute other approved transfer electives.
6. The literature elective requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
7. Students with good computer skills may seek to satisfy this requirement by CLEP.
8. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHEM 101, CHEM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, PHY 242.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
Liberal Arts, Communications Specialization

Associate of Arts (A.A.)

Purpose
The associate of arts curriculum in liberal arts with a specialization in communications is designed for students who plan to transfer to four-year colleges or universities and seek bachelor’s degrees in fields such as mass communications, journalism, public relations and other related programs that require foreign language as part of their general education requirements.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

1st Semester
- ENG 111 College Composition I 3
- CST 100 Principles of Public Speaking or CST 110 Introduction to Communication 3
- MTH 158 College Algebra or MTH 163 Precalculus I 3
- SDV 100 College Success Skills 1
- Foreign Language (101) 4
- History Elective 3
- Total Credits 17

2nd Semester
- ENG 112 College Composition II 3
- MTH 240 Statistics 3
- Foreign Language (102) 4
- Communications Elective 3
- History Elective 3
- Total Credits 16

3rd Semester
- ITE 115 Introduction to Computer Applications and Concepts 3
- Foreign Language (201) 3
- Communications Elective 3
- Laboratory Science Elective 4
- Total Credits 13

4th Semester
- PHI 220 Ethics 3
- Foreign Language (202) 3
- Laboratory Science Elective 4
- Physical Education/Health Elective 1
- Social/Behavioral Science Elective 3
- Total Credits 14

Total Credits For Program 60

Notes and Additional Curriculum Options
1. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100), and SOC.
2. The communications elective requirements can be satisfied by the following courses: CST 111, CST 115, CST 126, CST 227, CST 229 or any other CST courses approved by the student’s advisor, and ENG 121.
3. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student’s advisor and dean.
4. Students must demonstrate competency in a foreign language through the 202 level by completing appropriate courses and/or examinations. Placement in foreign language is by SAT II Subject Test score or departmental recommendation. Students who are not required to take introductory-level courses must substitute other approved transfer electives.
5. Students with good computer skills may seek to satisfy this requirement by CLEP.
6. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, PHY 242.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
Liberal Arts, Music Specialization

Associate of Arts (A.A.)

Purpose
The associate of arts curriculum in liberal arts with a specialization in music is designed for students who plan to transfer to four-year colleges or universities and seek a bachelor’s degree in music or music education, particularly in programs that require foreign language as part of their general education requirements.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111  College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
<td>MTH 170, MTH 173</td>
</tr>
<tr>
<td>MUS 101 Basic Musicianship I</td>
<td>3</td>
<td>MUS 111</td>
</tr>
<tr>
<td>SDV 101 Orientation to Visual and Performing Arts Programs</td>
<td>1</td>
<td>SDV 100 College Success Skills</td>
</tr>
<tr>
<td>Foreign Language (101)</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 112  College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 164, MTH 270, MTH 174</td>
</tr>
<tr>
<td>MUS 102 Basic Musicianship II</td>
<td>3</td>
<td>MUS 112</td>
</tr>
<tr>
<td>Foreign Language (102)</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>3rd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Foreign Language (201)</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Music Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>4th Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language (202)</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Music Elective</td>
<td>2</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Total Credits For Program</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

Notes and Additional Curriculum Options
1. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student’s advisor and dean.
2. The music elective requirements must include 3 credits in music history or appreciation and 2 credits of applied music.
3. Students must demonstrate competency in a foreign language through the 202 level by completing appropriate courses and/or examinations. Placement in foreign language is by SAT II Subject Test score or departmental recommendation. Students who are not required to take introductory level courses must substitute other approved transfer electives.
4. The literature elective requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
5. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, PHY 242.
6. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100) and SOC. Students interested in pursuing a degree in music education should take PSY 230.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
# Liberal Arts, Secondary Teacher Education Specialization in English

## Associate of Arts (A.A.)

### Purpose

This program is specifically designed for students who plan to transfer into an English major at most four-year universities and plan to teach English at the secondary level. Following the prescribed coursework in this program will result in graduation with the Associate in Arts Degree (A.A.) in Liberal Arts with a Specialization in Secondary Teacher Education in English. Students who complete this program will be required to pass the PRAXIS I for acceptance into teacher education programs at four-year universities. Students should consult with their advisors to ensure that they select courses that best prepare them for the specific requirements of their intended transfer college or university for a major in English. Specific secondary teacher education requirements vary at universities; however, and students should consult with four-year universities for additional guidance regarding electives for pre-teacher preparation.

### Program Requirements and Special Conditions

Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

### Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>ITE 200. See Note 1.</td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>SDV 101 Orientation to Future Teachers</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td>Foreign Language (101)</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Physical Education/Health elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIS 121 United States History I</td>
<td>3</td>
<td>HIS 122</td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 164, MTH 270, MTH 173</td>
</tr>
<tr>
<td>Foreign Language (102)</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 6 and Note 8.</td>
</tr>
<tr>
<td>EDU 200 Introduction to Teaching as a Profession</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIS 101 History of Western Civilization</td>
<td>3</td>
<td>HIS 102, HIS 111, HIS 112. See Note 5.</td>
</tr>
<tr>
<td>Foreign Language (201)</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>ENG 241 Survey of American Literature I</td>
<td>3</td>
<td>ENG 242, ENG 243, ENG 244, ENG 251, ENG 252</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Notes 6 and 8.</td>
</tr>
<tr>
<td>CST 100 Principles of Public Speaking</td>
<td>3</td>
<td>CST 110, CST 115</td>
</tr>
<tr>
<td>Foreign Language (202)</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Philosophy/Religion Elective</td>
<td>3</td>
<td>See Note 7.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**: 60

### Notes and Additional Curriculum Options

1. Students transferring to Virginia State University should take ITE 200. The computer literacy requirement also can be satisfied by CLEP examinations.
2. Students may elect to take MTH 158 and MTH 240 or MTH 163 and MTH 240 as minimum preparation for transfer.
3. Students must demonstrate competency in a foreign language through the 202 level by completing appropriate courses and/or examinations. Placement in foreign language is by SAT II Subject Test score or departmental recommendation. Students who are not required to take introductory-level courses should substitute other approved transfer electives especially in the disciplines of English and CST. Those students planning to transfer to VCU should take ENG 210 as one of their electives. It is recommended that students review the requirements for an English major at their prospective four-year institution.
4. The social/behavioral science elective can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PSY (except PSY 100) and SOC.
5. It is recommended that the HIS requirement include United States History and History of Western or World Civilizations. Students should consult prospective four-year institutions.
6. Two different science disciplines are recommended and are even required at some transfer institutions.
7. Consult with prospective four-year institution regarding a requirement for philosophy and/or religion.
8. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHEM 101, CHEM 102, Q, CHEM 111, CHEM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, PHY 242.

For additional information on this program, please contact the Division of Engineering, Business, and Public Services: 804-706-5121 (Chester Campus) or 804-594-1480 (Midlothian Campus) or the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
**Purpose**
This program is specifically designed for students who plan to transfer into a History major at most four-year universities and plan to teach history at the secondary level. Following the prescribed coursework in this program will result in graduation with the Associate in Art Degree (A.A.) in Liberal Arts with a Secondary Teacher Education Specialization in History. Students who complete this program will be required to pass the PRAXIS I for acceptance into teacher education programs at four-year universities. Students should consult with their advisors to ensure that they select courses that best prepare them for the specific requirements of their intended transfer college or university for a major in history. Specific secondary teacher education requirements vary at universities; however, and students should consult with four-year universities for additional guidance regarding electives for pre-teacher preparation.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

### Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIS 121 United States History I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education/Health elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Pre-calculus I</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>SDV 101 Orientation to Future Teachers</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td>Foreign Language (101)</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>ITE 200. See Note 1.</td>
</tr>
<tr>
<td>HIS 122 United States History II</td>
<td>3</td>
<td>HIS 101, HIS 102. See Note 4.</td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 164</td>
</tr>
<tr>
<td>Foreign Language (102)</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>3rd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Notes 7 and 9.</td>
</tr>
<tr>
<td>ECO 201 Principles of Macroeconomics</td>
<td>3</td>
<td>PLS 135, ECO 120, ECO 202. See Note 5.</td>
</tr>
<tr>
<td>EDU 200 Introduction to Teaching as a Profession</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Foreign Language (201)</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>4th Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 7 and Note 9.</td>
</tr>
<tr>
<td>Foreign Language (202)</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>GEO 210 People and the Land: Cultural Geography</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Visual &amp; Performing Arts Elective</td>
<td>3</td>
<td>See Note 8.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

**Notes and Additional Curriculum Options**
1. Students transferring to Virginia State University should take ITE 200. The computer literacy requirement also can be satisfied by CLEP examinations.
2. Students may elect to take MTH 158 and MTH 240 or MTH 163 and MTH 240 as minimum preparation for transfer.
3. Students must demonstrate competency in a foreign language by SAT II Subject Test score or departmental recommendation. Students who are not required to take introductory-level courses should substitute other approved transfer electives, particularly in the social/behavioral science areas of HIS, ECO, PLS, GEO, SOC and PSY. Some senior institutions require a philosophy or religion course. Students planning to transfer to Virginia Commonwealth University may need to take ENG 210.
4. It is recommended that the history requirement include American History and History of Western Civilizations or History of World Civilizations.
5. ECO 120 may be used as a standard course option for some colleges and universities. Please consult with your transfer institution.
6. The literature elective requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
7. Two different science disciplines are recommended and even required at some transfer institutions.
8. The visual and performing arts elective can be satisfied by any ART or MUS course or any CST acting or theatre course to include CST 130, CST 131, CST 132, CST 136, CST 195, CST 231 and CST 232.
9. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, PHY 242.

For additional information on this program, please contact the Division of Engineering, Business, and Public Services: 804-706-5121 (Chester Campus) or 804-594-1480 (Midlothian Campus) or the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
Liberal Arts, Theatre Arts Specialization

Associate of Arts (A.A.)

Purpose
The associate of arts curriculum in liberal arts with a specialization in theatre arts is designed for students who plan to transfer to four-year colleges or universities and seek a bachelor’s degree in theatre, particularly in programs that require foreign language as part of their general education requirements.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CST 131 Acting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 PreCalculus I</td>
<td>3</td>
<td>MTH 170, MTH 173</td>
</tr>
<tr>
<td>SDV 101 Orientation to Visual and Performing Arts Programs</td>
<td>1</td>
<td>SDV 100 College Success Skills</td>
</tr>
<tr>
<td>Foreign Language (101)</td>
<td>4</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CST 132 Acting II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 164, MTH 270, MTH 174</td>
</tr>
<tr>
<td>Foreign Language (102)</td>
<td>4</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CST 210 Theatre Aesthetics</td>
<td>3</td>
<td>CST 130, CST 231, CST 232</td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Foreign Language (201)</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Literature Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CST 136 Theatre Workshop</td>
<td>3</td>
<td>CST 145, CST 252</td>
</tr>
<tr>
<td>Foreign Language (202)</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**: **61**

Notes and Additional Curriculum Options
1. The history elective requirements can be satisfied by the following courses: HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122 or any other HIS course approved by the student’s advisor and dean.
2. Students must demonstrate competency in a foreign language through the 202 level by completing appropriate courses and/or examinations. Placement in foreign language is by SAT II Subject Test score or departmental recommendation. Students who are not required to take introductory level courses must substitute other approved transfer electives.
3. The literature elective requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
4. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, PHY 242.
5. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY (except PSY 100) and SOC. Students interested in pursuing a degree in theatre education should take PSY 230.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
Applied Arts Degrees

This section provides a listing of John Tyler Community College's applied arts degree programs. The College's programs are subject to change. For an updated list, please visit the College's web site at www.jtcc.edu/academics.
Visual Arts
Associate of Applied Arts (A.A.A.)

Purpose
In addition to developing their creative abilities, students gain experiences with the tools and processes associated with various visual arts media and learn about the exhibition and marketing of artwork.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

1st Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101 History and Appreciation of Art I</td>
<td>3</td>
</tr>
<tr>
<td>ART 111 Introduction to the Arts I</td>
<td>3</td>
</tr>
<tr>
<td>ART 121 Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 131 Fundamentals of Design I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SDV 101 Orientation to Visual &amp; Performing Arts Programs</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Credits:** 16

2nd Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 102 History and Appreciation of Art II</td>
<td>3</td>
</tr>
<tr>
<td>ART 122 Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 132 Fundamentals of Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 133 Visual Arts Foundation</td>
<td>4</td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>Health or Physical Education Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Credits:** 17

3rd Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>1</td>
</tr>
<tr>
<td>Communications Studies and Theatre Elective</td>
<td>3</td>
</tr>
<tr>
<td>ART Elective</td>
<td>3</td>
</tr>
<tr>
<td>ART Elective</td>
<td>3</td>
</tr>
<tr>
<td>Photography or Film Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits:** 16

4th Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 287 Portfolio and Resume Preparation</td>
<td>1</td>
</tr>
<tr>
<td>ART Elective</td>
<td>3</td>
</tr>
<tr>
<td>ART Elective</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics/Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits:** 16

**Total Credits For Program:** 65

Notes and Additional Curriculum Options
1. Acceptable art electives include the following: ART 138, ART 153, ART 154, ART 203, ART 204, ART 217, ART 218, ART 231, ART 232, ART 241, ART 242, ART 243, ART 244, ART 245, ART 246, ART 248, ART 249, ART 259. Students should consult with their academic advisor about other options.

2. Must be a culminating experience course (2nd in a sequence or higher): ART 154, ART 204, ART 218, ART 232, ART 242, ART 244, ART 248 or ART 249. Students should consult with their academic advisor about other options.

3. The mathematics/science elective requirement can be satisfied by courses with the following prefixes: BIO, CHM, ENV, GOI, MTH and PHY.

4. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY and SOC.

5. Part-time students should consult their faculty advisors regarding appropriate course sequences.

6. Approved ART or CST courses may be used to satisfy the photography or film elective. Students should consult with their faculty advisors.

7. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
**Visual Arts, Film Specialization**

**Associate of Applied Arts (A.A.A.)**

**Purpose**
For students who intend to pursue careers in film production. Program coursework provides a foundation for the fine and applied arts and allows students to learn techniques specific to digital filmmaking. Students are required to prepare portfolios of their work.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101 History and Appreciation of Art I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CST 151 Film Appreciation I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 121 Drawing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 131 Fundamentals of Design I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV 101 Orientation to Visual &amp; Performing Arts Programs</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 102 History and Appreciation of Art II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 132 Fundamentals of Design II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 133 Visual Arts Foundation</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Communication Studies and Theatre Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 150 History of Film and Animation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health or Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PHT 150 Film Production I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Photography or Film Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Photography or Film Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 287 Portfolio and Resume Preparation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Art Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics/Science Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>PHT 151 Film Production II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHT 274 Digital Film Editing and Post Production</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 65

**Notes and Additional Curriculum Options**
1. Film students are encouraged to take CST 140 Acting for the Camera.
2. Approved ART or CST courses may be used to satisfy the photography or film elective. Students should consult with their faculty advisors.
3. The mathematics/science elective requirement can be satisfied by courses with the following prefixes: BIO, CHM, ENV, GOL, MTH and PHY.
4. The social/behavioral science elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY and SOC.
5. Part-time students should consult their faculty advisors regarding appropriate course sequences.
6. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
Visual Arts, Photography Specialization

Associate of Applied Arts (A.A.A.)

**Purpose**
For students who intend to pursue careers in photography. Program coursework provides a foundation for the fine and applied arts and allows students to learn techniques specific to photography. Students are required to prepare portfolios of their work.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 101 History and Appreciation of Art I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 111 Introduction to the Arts I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 121 Drawing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 131 Fundamentals of Design I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV 101 Orientation to Visual &amp; Performing Arts Programs</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 102 History and Appreciation of Art II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 132 Fundamentals of Design II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 133 Visual Arts Foundation</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHT 164 Introduction to Digital Photography</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>3rd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Studies and Theatre Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health or Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PHT 110 History of Photography</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHT 135 Electronic Darkroom</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHT 221 Studio Lighting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td><strong>4th Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 287 Portfolio and Resume Preparation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Art Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Mathematics/Science Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>PHT 264 Digital Photography II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Photography or Film Elective</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>65</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Notes and Additional Curriculum Options**
1. Approved Photography courses may be used to fulfill the Art elective requirement. Students should consult with their faculty advisor.
2. The mathematics/science elective requirement can be satisfied by courses with the following prefixes: BIO, CHM, ENV, GOL, MTH and PHY.
3. The social/behavioral science elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY and SOC.
4. Part-time students should consult their faculty advisors regarding appropriate course sequences.
5. Approved ART or CST courses may be used to satisfy the photography elective. Students should consult with their faculty advisors.
6. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
Visual Arts, Visual Communications Specialization

Associate of Applied Arts (A.A.A.)

**Purpose**
For students who intend to pursue careers in graphic design. Program coursework allows students to learn techniques specific to computer-generated design and imagery and explore all stages of publication, from creative inception to pre-press. Students are required to prepare portfolios of their work.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 101 History and Appreciation of Art I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 111 Introduction to the Arts I</td>
<td>3</td>
<td>ART 180, See Note 1.</td>
</tr>
<tr>
<td>ART 121 Drawing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 131 Fundamentals of Design I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV 101 Orientation to Visual &amp; Performing Arts Programs</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 102 History and Appreciation of Art II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 122 Drawing II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 132 Fundamentals of Design II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 133 Visual Arts Foundation</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>3rd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 141 Typography I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ART 217 Electronic Graphic Design I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ART 250 History of Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health or Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Photography or Film Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>4th Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 218 Electronic Graphic Design II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ART 291 Computerized Graphic Design I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Communication Studies and Theatre Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics/Science Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td></td>
<td><strong>65</strong></td>
</tr>
</tbody>
</table>

**Notes and Additional Curriculum Options**
1. Students without any prior design software experience should select ART 180. Students should consult with their faculty advisors.
2. Approved ART or CST courses may be used to satisfy the photography or film elective. Students should consult with their faculty advisors.
3. The mathematics/science elective requirement can be satisfied by courses with the following prefixes: BIO, CHM, ENV, GOL, MTH and PHY.
4. The social/behavioral sciences elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY and SOC.
5. Part-time students should consult their faculty advisors regarding appropriate course sequences.
6. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
Applied Science Degrees

This section provides a listing of John Tyler Community College's applied science degree programs. The College's programs are subject to change. For an updated list, please visit the College's web site at www.jtcc.edu/academics.
**Accounting**

Associate of Applied Science (A.A.S.)

**Purpose**
This program is designed both for students seeking first-time employment in the accounting field and for those already working in accounting, to provide opportunities to develop and improve skills necessary for advancement. Included in the program are activities that enhance analytical, technical, communication, leadership and human-relations skills. Graduates will be able to: (1) use all the steps of the accounting cycle for various business entities, including sole proprietorships, partnerships and corporations; (2) analyze and interpret financial statements; (3) use accounting computer software to maintain accounting records and to prepare financial statements; (4) prepare the Federal Tax Form 1040 and supporting schedules to include Schedule C for sole proprietorships and Schedule SE for self-employment tax and to research basic tax questions; and (5) apply theory in the practice of job-order and standard cost-accounting systems.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

**1st Semester**
- ACC 211 Principles of Accounting I 3
- BUS 100 Introduction to Business 3
- ENG 111 College Composition I 3
- MTH 120 Introduction to Mathematics 3
- PSY 126 Psychology for Business and Industry 3
- SDV 100 College Success Skills 1

**Total Credits** 16

**2nd Semester**
- ACC 212 Principles of Accounting II 3
- BUS 125 Applied Business Mathematics 3
- BUS 200 Principles of Management 3
- ECO 120 Survey of Economics 3
- Health or Physical Education Elective 2
- Philosophy or Religion Elective 3

**Total Credits** 17

**3rd Semester**
- ACC 221 Intermediate Accounting I 4
- ACC 231 Cost Accounting I 3
- BUS 220 Introduction to Business Statistics 3
- BUS 241 Business Law I 3
- ITE 115 Introduction to Computer Applications and Concepts 3

**Total Credits** 16

**4th Semester**
- ACC 215 Computerized Accounting 3
- ACC 222 Intermediate Accounting II 4
- ACC 261 Principles of Federal Taxation I 3
- BUS 236 Communications in Management 3
- CST 100 Principles of Public Speaking 3

**Total Credits** 16

**Total Credits For Program** 65

**Notes and Additional Curriculum Options**
1. The philosophy or religion elective requirement can be satisfied by courses with a PHI or REL prefix.
2. Part-time students should consult their faculty advisors regarding appropriate course sequences.
3. Students with good computer skills may seek to satisfy this requirement by CLEP.
4. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Advanced Manufacturing Technology (pending approval)

Associate of Applied Science (A.A.S.)

Purpose
The advanced manufacturing technology degree is designed to meet the evolving workforce needs of business and industry. Manufacturing today depends on the combination of new technology, new materials and advanced processes. The degree provides the student with the general knowledge and technical foundation skills in the areas of quality control, rapid prototyping, lean production technologies, supply chain management and computer integrated manufacturing. The program prepares the student to function effectively as an advanced manufacturing technician or serve in a supervisory position in a manufacturing setting.

Program Requirements and Special Conditions
A high school diploma (or equivalent) and satisfactory scores on college placement tests (or equivalent) in English and mathematics are required. If students have deficiencies in English and/or mathematics, JTCC offers remedial courses to prepare students for the curriculum. Work-based learning is a required component of the program. Students without current or recent related work experience are responsible for securing their own internships, assisted by JTCC faculty. Students with current or related work experience are responsible for working with the faculty advisor to secure appropriate documentation.

Program Curriculum

1st Semester  Credits  Standard Course Options
CDM 201 Computer Aided Drafting & Design 3  
ENG 115 Technical Writing 3  ENG 111
IND 116 Applied Technology 3  
MTM 103 Applied Technical Mathematics I 3  MTH 158, MTH 163, MTH 273
SAF 126 Principles of Industrial Safety 3  
SDV 101 Orientation to Advanced Manufacturing 1  SDV 100
Total Credits 16

2nd Semester  Credits  Standard Course Options
DRF 128 Geometric Dimensioning and Tolerancing 2  
ELE 150 A.C. and D.C. Circuit Fundamentals 4  MTH 158, MTH 163, MTH 273
MTM 104 Applied Technical Mathematics II 3  
Physical Education/Health Elective 1  
MAC 121 Computer Numerical Control 1 3  
IND 137 Team Concepts & Problem Solving 3  
Total Credits 16

3rd Semester  Credits  Standard Course Options
CDM 235 Applications for Additive Manufacturing 3  
ELE 239 Programmable Controllers 3  
IND 101 Quality Assurance Technology I 3  BUS 208
Restricted Technical Elective 3  ELE 156, MEC 140, MAC 122
MEC 113 Materials and Process of Industry 3  
Total Credits 15

4th Semester  Credits  Standard Course Options
ELE 240 Advanced Programmable Logic Controllers 3  
BUS 234 Supply Chain Management 3  BUS 266
IND 181 World Class Manufacturing 3  
IND 250 Introduction to Basic Computer Integrated Manufacturing 3  
HUM Elective 3  See Note 1.
PSY 126 Psychology for Business and Industry 3  PSY 200
Total Credits 18

Total Credits For Program 65

Notes and Additional Curriculum Options
1. The Humanities Elective may be satisfied by completing a conceptual humanities course. Students should consult with their faculty advisor. The complete list of humanities electives is found online at http://www.jtcc.edu/downloads/academics/Approved_HumanitiesElectives.pdf
2. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

Part-time students should consult their faculty advisors regarding appropriate course sequences.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121(Chester) or 804-594-1480 (Midlothian).
Architectural Engineering Technology

Associate in Applied Science (A.A.S.)

**Program Requirements and Special Conditions**

Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 121 Architectural Drafting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ARC 221 Architectural CAD Applications Software I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ARC 258 Building Codes, Contract Documents and Professional Office Practices</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 163 Precalculus I</td>
<td>3</td>
<td>MTH 173</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 122 Architectural Drafting II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ARC 243 Environmental Systems</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ARC 222 Architectural CAD Application Software II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEC 270 Computations for Engineering Technology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 164 Precalculus II</td>
<td>3</td>
<td>MTH 174</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 231 Advanced Architectural Drafting I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ARC 246 Materials and Methods of Construction</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CIV 171 Surveying I</td>
<td>3</td>
<td>GIS 101</td>
</tr>
<tr>
<td>MEC 131 Mechanics I – Statics for Engineering Technology</td>
<td>3</td>
<td>EGR 140</td>
</tr>
<tr>
<td>Laboratory Sciences Elective</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 232 Advanced Architectural Drafting II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CST 100 Principles of Public Speaking</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** | **65** |

**Notes and Additional Curriculum Options**

1. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

2. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.

3. The laboratory science elective requirement can be satisfied by courses with the following prefixes: CHM and PHY.

4. The social science elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY and SOC.

5. Part-time students should consult their faculty advisors regarding appropriate course sequences.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121(Chester) or 804-594-1480 (Midlothian).
Business Management

Associate of Applied Science (A.A.S.)

Purpose
All organizations require individuals who possess good managerial skills. This program provides students with opportunities to develop and improve skills necessary for success as a supervisor or manager. Included in the program are activities that enhance analytical, technical, communication, leadership and human relations skills. Graduates will be able to: (1) communicate effectively in business environments, using common terminology; (2) analyze and resolve problems common to entry-level business positions; (3) utilize basic management principles in first-line supervisory situations; (4) analyze a managerial situation to determine fact from opinion; (5) analyze a business situation financially, organizationally and behaviorally; (6) utilize good human-relations skills in a managerial role; and (7) apply computer skills to the solution of management-related problems.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 100 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MTH 120 Introduction to Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 212 Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 125 Applied Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 200 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>ECO 120 Survey of Economics</td>
<td>3</td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>Philosophy or Religion Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

3rd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 220 Introduction to Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 241 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>CST 100 Principles of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>PSY 126 Psychology for Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>Business Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

4th Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 236 Communications in Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 205 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 266 Production and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 298 Seminar and Project</td>
<td>3</td>
</tr>
<tr>
<td>MKT 100 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Information Technology Restricted Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Total Credits For Program**

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
</tr>
</tbody>
</table>

Notes and Additional Curriculum Options
1. The business elective requirement may be satisfied by taking a total of three credits in courses with any of the following prefixes: ACC, AST, BUS, ITD, ITE, ITN, ITP, FIN and MKT.
2. The philosophy or religion elective requirement can be satisfied by courses with a PHI or REL prefix.
3. Students with good computer skills may seek to satisfy this requirement by CLEP.
4. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Criminal Justice
Associate of Applied Science (A.A.S.)

Purpose
This program provides students with opportunities to develop and improve skills necessary for success as local, state or federal law enforcement or corrections officers; commercial and industrial security officers; and private or government investigators.

PROGRAM REQUIREMENTS AND SPECIAL CONDITIONS
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Persons entering the public or private sectors of criminal justice employment will be subjected to intensive physical agility tests, background investigations, psychological testing, personal interviews, physical examinations and polygraph examinations.

Program Curriculum

1st Semester
- ADJ 100 Survey of Criminal Justice 3
- ENG 111 College Composition I 3
- ITE 115 Introduction to Computer Applications and Concepts 3
- MTH 120 Introduction to Mathematics 3
- SOC 200 Principles of Sociology 3
- SDV 100 College Success Skills 1
Total Credits 16

2nd Semester
- ADJ 105 The Juvenile Justice System 3
- ADJ 107 Survey of Criminology 3
- ADJ 229 Law Enforcement and the Community or ADJ 145 Corrections and the Community 3
- PSY 200 Principles of Psychology 3
- Philosophy or Religion Elective 3
Total Credits 15

3rd Semester
- ADJ 111 Law Enforcement Organization and Administration I or ADJ 245 Management of Correctional Facilities 3
- ADJ 230 Civil Liabilities in Criminal Justice 3
- ADJ 211 Criminal Law, Evidence and Procedures I 3
- ADJ 133 Ethics and the Criminal Justice Professional 3
- ADJ 236 Principles of Criminal Investigation 3
- ADJ 247 Criminal Behavior 3
Total Credits 18

4th Semester
- ADJ 112 Law Enforcement Organization and Administration II 3
- ADJ 212 Criminal Law, Evidence and Procedures II 3
- ADJ 227 Constitutional Law for Justice Personnel or ADJ 241 Correctional Law 3
- CST 100 Principles of Public Speaking 3
- Administration of Justice Elective 3
- Health/Physical Education Elective 2
Total Credits 17

Total Credits for Program 66

NOTES AND ADDITIONAL CURRICULUM OPTIONS
1. The philosophy or religion elective requirement can be satisfied by courses with a PHI or REL prefix.
2. Students planning to transfer to a four-year program should choose options and substitutions with the assistance of their advisor.
3. Part-time students should consult their faculty advisors regarding appropriate course sequences.
4. Students with good computer skills may seek to satisfy this requirement by CLEP.
5. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Criminal Justice, Homeland Security Specialization
Associate of Applied Science (A.A.S.)

Purpose
This program provides students with opportunities to develop and improve skills necessary for success as local, state or federal law enforcement or corrections officers; commercial and industrial security officers and private or government investigators.

PROGRAM REQUIREMENTS AND SPECIAL CONDITIONS
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Persons entering the public or private sectors of criminal justice employment will be subjected to intensive physical agility tests, background investigations, psychological testing, personal interviews, physical examinations and polygraph examinations.

Program Curriculum

1st Semester
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 100 Survey of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer</td>
<td>3</td>
</tr>
<tr>
<td>Applications and Concepts</td>
<td></td>
</tr>
<tr>
<td>MTH 120 Introduction to Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

2nd Semester
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 160 Police Response to Critical Incidents</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 107 Survey of Criminology</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 229 Law Enforcement and the Community</td>
<td>3</td>
</tr>
<tr>
<td>or ADJ 145 Corrections and the Community</td>
<td></td>
</tr>
<tr>
<td>PSY 200 Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy or Religion Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

3rd Semester
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 163 Crime Analysis and Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 170 Street Gangs and Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 211 Criminal Law, Evidence and Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 133 Ethics and the Criminal Justice Professional</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 236 Principles of Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 247 Criminal Behavior</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

4th Semester
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 234 Terrorism and Counter-Terrorism</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 212 Criminal Law, Evidence and Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 227 Constitutional Law for Justice Personnle</td>
<td>3</td>
</tr>
<tr>
<td>or ADJ 241 Correctional Law</td>
<td></td>
</tr>
<tr>
<td>ADJ 244 Terrorism Response Planning</td>
<td>3</td>
</tr>
<tr>
<td>CST 100 Principles of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Total Credits For Program                  | **66**  |

NOTES AND ADDITIONAL CURRICULUM OPTIONS
1. Students planning to transfer to a four-year program should choose options and substitutions with the assistance of their advisor.
2. Part-time students should consult their faculty advisors regarding appropriate course sequences.
3. Students with good computer skills may seek to satisfy this requirement by CLEP.
4. The philosophy or religion elective requirement can be satisfied by courses with a PHI or REL prefix.
5. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Early Childhood Development
Associate of Applied Science (A.A.S.)

**Purpose**
This program provides students with opportunities to develop and improve skills necessary to work with children from birth to age 12 in a variety of early childhood settings, including public schools, child-care centers, Head Start, home-visitor and preschool programs, and as family childcare providers and nannies. The curriculum has been established to provide competence in areas documented by Virginia’s Competencies for Early Childhood Professionals: health, safety and nutrition, understanding child growth and development, appropriate child observation and assessment, partnering with families and community, learning environment, effective interactions, program management, teacher qualifications and professional development. Graduates will be able to: (1) use professional terminology for effective communication; (2) plan and implement instruction; (3) analyze and resolve problems; (4) use good human relations skills; (5) apply basic child/classroom observation skills; (6) locate, compile and analyze appropriate resources, activities and materials; (7) determine and use appropriate actions according to regulations; and (8) apply appropriate computer skills.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Students are expected to demonstrate or acquire basic computer literacy. Students entering the public or private sectors of early childhood may be subject to criminal background and sex offender registry checks and a TB screening as a condition of their placement in a

**Program Curriculum**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHD 119</td>
<td>3</td>
<td>Introduction to Reading Methods</td>
</tr>
<tr>
<td>CHD 120</td>
<td>3</td>
<td>Introduction to Early Childhood Education</td>
</tr>
<tr>
<td>CHD 145</td>
<td>3</td>
<td>Methods and Materials for Teaching Art, Music and Movement to Children</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
<td>College Composition I</td>
</tr>
<tr>
<td>HLT 106</td>
<td>2</td>
<td>First Aid and Safety See Note 5.</td>
</tr>
<tr>
<td>SDV 100</td>
<td>1</td>
<td>College Success Skills</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHD 118</td>
<td>3</td>
<td>Methods and Materials in the Language Arts for Children</td>
</tr>
<tr>
<td>CHD 146</td>
<td>3</td>
<td>Methods and Materials for Teaching Math, Science and Social Studies to Children</td>
</tr>
<tr>
<td>CHD 205</td>
<td>3</td>
<td>Guiding the Behavior of Children</td>
</tr>
<tr>
<td>CHD 215</td>
<td>3</td>
<td>Models of Early Childhood Education Programs</td>
</tr>
<tr>
<td>CHD 216</td>
<td>3</td>
<td>Early Childhood Programs, School, and Social Change</td>
</tr>
<tr>
<td>ENG 112</td>
<td>3</td>
<td>College Composition II</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
<tr>
<td><strong>3rd Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHD 165</td>
<td>3</td>
<td>Observation and Participation in Early Childhood/Primary Settings See Notes 1 and 2.</td>
</tr>
<tr>
<td>CHD 210</td>
<td>3</td>
<td>Introduction to Exceptional Children</td>
</tr>
<tr>
<td>CHD 270</td>
<td>3</td>
<td>Administration of Childcare Programs</td>
</tr>
<tr>
<td>EDU 235</td>
<td>3</td>
<td>Health, Safety, and Nutrition Education</td>
</tr>
<tr>
<td>MTH 120</td>
<td>3</td>
<td>Introduction to Mathematics</td>
</tr>
<tr>
<td>PSY 235</td>
<td>3</td>
<td>Child Psychology</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
<tr>
<td><strong>4th Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHD 166</td>
<td>3</td>
<td>Infant and Toddler Programs</td>
</tr>
<tr>
<td>CST 100</td>
<td>3</td>
<td>Principles of Public Speaking or CST 110 Introduction to Communication</td>
</tr>
<tr>
<td>CHD 265</td>
<td>3</td>
<td>Advanced Observation and Participation in Early Childhood/Primary Settings See Notes 1 and 3.</td>
</tr>
<tr>
<td>CHD 298</td>
<td>1</td>
<td>Seminar Portfolio Development See Note 3.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOC 215</td>
<td>3</td>
<td>Sociology of the Family</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>67</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Notes and Additional Curriculum Options**
1. CHD 165 and CHD 265 are observation and participation classes that require students to observe children in settings approved by the program head.
2. CHD 165 must be taken before CHD 265 and CHD 298 because materials developed in CHD 165 are used in CHD 265 and CHD 298.

continued
Early Childhood Development  
continued

Program Requirements and Special Conditions continued

training practicum site. Students will be expected to cover any and all costs incurred for these procedures. This may also be required as a condition of employment.

3. CHD 298 must be taken in conjunction with CHD 265.
4. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
5. Students who have current certifications in First Aid and Safety and CPR (child or adult) can use these to fulfill the two-credit HLT 106 requirement. The original cards must be presented to the Admissions and Records office. No online First Aid/CPR cards will be accepted for credit at JTCC.
6. Students entering the public or private sectors of early childhood education will be subjected to criminal background and sex offender registry checks, as well as TB screening as a condition of their placement in a training/practicum site. Students will be expected to cover any costs incurred for these procedures. These tests will be required as a condition of employment.
7. Part-time students should consult their faculty advisors regarding appropriate course sequences.
8. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121(Chester) or 804-594-1480 (Midlothian).
# Early Childhood Development, Teacher Assistant Specialization

**Associate of Applied Science (A.A.S.)**

## Purpose

Most schools have a variety of teacher assistant positions available. One of the ways to meet the requirements of the No Child Left Behind legislation is for the teacher assistants to have an associate degree, and this specialization will meet that requirement. Graduates will be able to (1) use professional terminology for effective communication; (2) instruct small groups and individual students in a classroom while supervised by a certified teacher; (3) help students with developmental skills in the classroom; (4) implement planned lessons; (5) use good human relations skills; (6) apply appropriate computer skills; (7) analyze and resolve problems; (8) apply basic child/classroom observation skills; and (9) locate, compile and analyze appropriate resources, activities and materials.

## Program Requirements and Special Conditions

Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

## Program Curriculum

### 1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 120 Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>CHD 145 Methods and Materials for Teaching Art, Music and Movement to Children</td>
<td>3</td>
</tr>
<tr>
<td>CST 100 Principles of Public Speaking or CST 110 Introduction to Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HLT 106 First Aid and Safety</td>
<td>2</td>
</tr>
<tr>
<td>SDV 101 Orientation to Education</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### 2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 146 Methods and Materials for Teaching Math, Science and Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>CHD 205 Guiding the Behavior of Children</td>
<td>3</td>
</tr>
<tr>
<td>CHD 210 Introduction to Exceptional Children</td>
<td>3</td>
</tr>
<tr>
<td>CHD 216 Early Childhood Programs, School, and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ITE 295 Computers for Educators</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

### 3rd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 119 Introduction to Reading Methods</td>
<td>3</td>
</tr>
<tr>
<td>CHD 165 Observation and Participation in Early Childhood/Primary Settings</td>
<td>3</td>
</tr>
<tr>
<td>EDU 200 Introduction to Teaching as a Profession</td>
<td>3</td>
</tr>
<tr>
<td>MTH 170 Fundamentals Contemporary Math</td>
<td>3</td>
</tr>
<tr>
<td>MUS 121 Music Appreciation I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 235 Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

### 4th Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 265 Advanced Observation and Participation in Early Childhood/Primary Settings</td>
<td>3</td>
</tr>
<tr>
<td>CHD 298 Seminar and Portfolio Development</td>
<td>1</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>EDU 235 Health, Safety and Nutrition Education</td>
<td>3</td>
</tr>
<tr>
<td>SOC 215 Sociology of the Family</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 66

---

See Notes 1, 2, 3, 4, 5.
Notes and Additional Curriculum Options

1. EDU 200 - Introduction to Teaching as a Profession is a course that requires placement in approved activities by the program head.

2. Students who have current certifications in First Aid and Safety and CPR (Child or Adult) can use these to fulfill the two-credit HLT 106 requirement. The original cards must be presented to the Admissions and Records office. No online First Aid/CPR cards will be accepted for credit at JTCC.

3. Students with good computer skills may seek to satisfy this requirement by CLEP.

4. CHD 298 must be taken in conjunction with CHD 265.

5. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humaniteselectives) for a list of approved conceptual and applied humanities electives.

6. Part-time students should consult their faculty advisors regarding appropriate course sequences.

7. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121(Chester) or 804-594-1480 (Midlothian).
Electrical Engineering Technology (pending approval)
Associate of Applied Science (A.A.S.)

**Purpose**
The Electrical Engineering Technology degree prepares individuals for employment as commercial, industrial and residential electricians or electrician helpers. Completion of this degree will also expedite the certification process set by the Department of Professional and Occupational Regulation (DPOR) providing the graduate a two year path to becoming state certified as a journey electrician rather than completing a four-year DPOR experience requirement.

**PROGRAM REQUIREMENTS AND SPECIAL CONDITIONS**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in mathematics, and scores will be used for appropriate course placement. If students have deficiencies in mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>Program Curriculum</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 103 Applied Technical Mathematics I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td>ENG 115</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 1</td>
</tr>
<tr>
<td>ELE-150 A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 104 Applied Technical Mathematics II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE-156 Electrical Control Systems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE-131 National Electrical Code I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE-118 Practical Electricity</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ELE-110 Home Electric Power</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Restricted Business Elective</td>
<td>3</td>
<td>BUS 116, BUS 125, BUS 200, BUS 205</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities elective</td>
<td>3</td>
<td>See Note 2</td>
</tr>
<tr>
<td>ELE-159 Electric Motors</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE-127 Residential Wiring Methods</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE-137 National Electrical Code - Industrial</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SAF 130 Industrial Safety - OSHA 10</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 3</td>
</tr>
<tr>
<td>ELE-151 Electrical Troubleshooting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE-138 National Electrical Code Review I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Restricted Technical Electives</td>
<td>9</td>
<td>ELE, CAD, IND</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>18</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>65</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES AND ADDITIONAL CURRICULUM OPTIONS**

1. Students with good computer skills may seek to satisfy this requirement by CLEP.
2. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See website (http://www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
3. The social/behavioral science elective can be satisfied with the following prefixes: PSY, SOC, ECO, GEO, PLS, and HIS. Students in apprenticeship programs should take PSY 126.
4. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.
Emergency Medical Services – Paramedic (pending approval)

Associate of Applied Science (A.A.S.)

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 101 Orientation to Health Sciences</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td>BIO 141 Anatomy &amp; Physiology I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EMS 111 Emergency Medical Technician – Basic</td>
<td>7</td>
<td>EMS 112 and EMS 113</td>
</tr>
<tr>
<td>EMS 120 Emergency Medical Technician – Basic Clinical</td>
<td>1</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLT 143 Medical Terminology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EMS 151 Introduction to Advanced Life Support</td>
<td>4</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>EMS 152 Advanced Medical Care</td>
<td>2</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>EMS 153 Basic ECG Recognition</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>EMS 170 ALS Internship I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 142 Anatomy &amp; Physiology II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EMS 154 ALS Cardiac Care</td>
<td>2</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>EMS 157 ALS Trauma Care</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EMS 159 ALS Special Populations</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EMS 172 ALS Clinical Internship II</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>EMS 173 ALS Field Internship II</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 115 Introduction to Computer Applications &amp; Concepts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EMS 201 EMS Professional Development</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EMS 205 Advanced Pathophysiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EMS 207 Advanced Patient Assessment</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EMS 242 ALS Clinical Internship III</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>EMS 243 ALS Field Internship III</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities/Fine Arts Elective</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Notes 4 and 5.</td>
</tr>
<tr>
<td>EMS 209 Advanced Pharmacology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EMS 211 Operations</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>EMS 244 ALS Clinical Internship IV</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>EMS 245 ALS Clinical Internship V</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>71</strong></td>
<td></td>
</tr>
</tbody>
</table>

Notes and Additional Curriculum Options

1. EMS 120 must be taken concurrently with EMS 111 or EMS 113.
2. Students must pass cognitive and practical capstone assessments to obtain eligibility to test for EMT Certification.
3. Students who have completed EMS 155 will receive credit for EMS 152 and 154.
4. The social/behavioral science elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY and SOC. Students must pass cognitive and practical capstone assessments to obtain eligibility to test for All Certification levels.
5. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on

continued
skills, techniques and procedures. See website (http://www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives. PSY 230 will fulfill a pre-nursing PSY requirement.

6. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

**EMT Certification is required in order to begin ALS courses.** Students must earn a “B” or better in all EMS-specific courses, and a “C” or better for BIO 141 and BIO 142 for eligibility to test for State and/or National Certification.

For additional information on this program, please contact the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).
Funeral Services

Associate of Applied Science (A.A.S.)

Purpose

The Funeral Services Program is designed to provide the necessary technical skills, academic background, hands-on experience, and professional attitudes that will help the student become a fully-licensed funeral director and embalmer. The Funeral Services Program aims to help graduates recognize their importance as members of the funeral services profession. Students will recognize their importance and responsibilities as health care professionals and as community members and be compliant with federal, state and local regulations as they pertain to the practice of funeral services. Students also will understand the importance of trust and ethical behavior in their relationships with bereaved families and members of the funeral service profession who they are called upon to serve. A degree from John Tyler Community College fulfills the educational requirements of the Commonwealth of Virginia and most states to receive a funeral service license, funeral director’s license or embalmer’s license.

Graduates of the funeral services program will be able to:

1. Perform technical skills such as embalming with minimum supervision.
2. Implement and direct all aspects of funeral arrangements with minimum supervision.
3. Demonstrate an understanding of how to write a pre-need contract.
4. Set up and maintain an OSHA approved preparation room.
5. Follow all regulations pertaining to funeral services including Regulations of the Commonwealth of Virginia and the Federal Trade Commission.
6. Understand the impact of modern day funeral service practitioners.
7. Understand all aspects of funeral services including preparation, restorative arts, cremation, at-need arrangements, pre-need arrangements and providing funeral services.
8. Understand the importance of the history of funeral services and the impact on modern society with encouragement to conduct research along with faculty.
9. Understand the high standards of ethical conduct as set forth by the funeral services industry.

Program Requirements and Special Conditions

1. Be 18 years of age or older.
2. Graduation from an accredited four-year high school or its equivalent, such as a recognized G.E.D., or other evidence of academic

Program Curriculum

1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 110 Survey of Chemistry</td>
<td>3</td>
<td>CHM 101</td>
</tr>
<tr>
<td>FNS 110 Introduction to Funeral Service</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HLT 143 Medical Terminology I</td>
<td>3</td>
<td>HIM 111</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 101 Introduction to Microcomputers</td>
<td>1</td>
<td>Any ITE Course</td>
</tr>
<tr>
<td>CST 110 Introduction to Communication</td>
<td>3</td>
<td>CST 100, CST 115</td>
</tr>
<tr>
<td>FNS 121 Anatomy for Funeral Service I</td>
<td>3</td>
<td>BIO 141, NAS 161, BIO 145</td>
</tr>
<tr>
<td>PSY 116 Psychology of Death and Dying</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
</tbody>
</table>

3rd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
<td>SOC 246</td>
</tr>
<tr>
<td>FNS 125 Microbiology for Funeral Service</td>
<td>3</td>
<td>BIO 150</td>
</tr>
<tr>
<td>FNS 126 Pathology for Funeral Service</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FNS 236 Funeral Service Law</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

4th Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNS 111 Theory of Embalming I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FNS 113 Theory of Embalming Laboratory I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>FNS 211 Restorative Art I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FNS 231 Principles of Funeral Management I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>REL Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

5th Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNS 112 Theory of Embalming II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FNS 114 Theory of Embalming Laboratory II</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>FNS 212 Restorative Art II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FNS 232 Principles of Funeral Management II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>FNS 245 Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

| Total Credits For Program     | **65**  |                          |

Notes and Additional Curriculum Options

1. The Funeral Services Program at John Tyler Community College is accredited by the American Board of Funeral Service Education (ABFSE), 3414 Ashland Avenue, Suite G, St. Joseph, MO, 64506, 816-233-3747; Web: http://www.abfse.org/ and is approved by the State Board of Funeral Directors and Embalmers. The program also is a member of the National Association of Colleges of Mortuary Science.
2. In order to receive the Funeral Service license in the Commonwealth of Virginia, an individual must:
   * complete an accredited program of mortuary science or funeral services;
Funeral Services continued

- complete a 3000-hour internship with a licensed funeral service provider in the Commonwealth of Virginia as prescribed by the Regulations of the Board of Funeral Directors and Embalmers; and
- pass the Virginia State Board Examination after completing the educational requirements, the internship, applying and being approved by the Board.

3. The annual passage rate of first-time takers on the National Board Examination (NBE) for the most recent three-year period for this institution and all ABFSE accredited funeral service education programs is posted on the ABFSE web site (http://www.abfse.org).

4. General courses and prerequisite courses can be taken in any order during the first two semesters.

5. Completion of all courses in the Pre-Funeral Services curriculum with a grade of “C” or better and a 2.5 or better grade point average are prerequisites for placement into the Funeral Services Program.

6. FNS 245 can only be taken in the last semester and not without prior approval from the Funeral Services Program department chair.

7. Students are required to take the National Board Examination before graduation.

8. Transfer to Four-Year Colleges and Universities – Students should consult their academic advisors and their intended transfer institutions for specific direction in course selection. Required courses for any major at four-year institutions may vary.

9. Admission to the Funeral Services Program will occur twice per year. Effective Fall 2014, students will be admitted to the Funeral Services program every fall semester and every spring semester.

The Funeral Services Program Information Packet is available on the college website. For more information on the program, please contact Rhonda Keyes Pleasants, department chair, at 804-706-5118 or rpleasants@jtcc.edu. For additional information on this program, contact Rhonda Keyes Pleasants, department chair, at 804-706-5118 or the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).
Human Services  A.A.S

Associate in Applied Science (A.A.S.)

**Program Curriculum**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td><strong>ENG 111 College Composition I</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>HMS 100 Introduction to Human Services</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>SDV 100 College Success Skills</strong></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>SOC 200 Principles of Sociology</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>HMS/MEN Elective</strong></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Mathematics/Science Elective</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>MEN 101 Mental Health Skill Training I</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>PSY 200 Principles of Psychology</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>ENG 112 College Composition II</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>PSY 215 Abnormal Psychology</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>3rd Semester</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td><strong>HMS 251 Substance Abuse I</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Humanities Elective</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Information Technology Elective</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>MEN 102 Mental Health Skill Training II</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>General Electives</strong></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
<tr>
<td>4th Semester</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td><strong>Social Science Elective</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Health/Physical Education Elective</strong></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>MEN 190 Coordinated Practice</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>MEN 196 On-Site Training</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>MEN/HMS Elective</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>General Elective</strong></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>66</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Notes and Additional Curriculum Options**

1. Students must obtain a grade of “C” or better in the human services sequence courses (HMS 100, MEN 101, and MEN 102) in order to remain in the program.
2. Students must complete all developmental coursework before enrolling in HMS 100.
3. Students must complete HMS 100 with a grade of “C” or better prior to enrolling in MEN 101.
4. Students must complete MEN 101 with a grade of “C” or better prior to enrolling in MEN 102.
5. MEN 102 must be taken prior to enrolling in MEN 190 and MEN 196 or MEN 290 and 296. MEN 190 and MEN 196 are corequisites and must be taken in the same semester. In these courses, students will complete 100 hours of practical hands-on training. Students will secure their own internship sites prior to the start of their MEN 190 and MEN 196 classes or their MEN 290 and MEN 296 classes. All internships must be approved by the Human Services and Mental Health program chair.

continued
6. Full and part-time students desiring to transfer to four-year programs should consult with their academic advisors for appropriate mathematics, psychology and general elective courses. In addition, students should consult their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

7. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See website (http://www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.

8. Students who have current certifications in First Aid and Safety and CPR (Child or Adult) can use these to fulfill the two credit HLT/PE elective requirement. The original cards must be presented to the faculty advisor. Students planning to transfer to four-year programs should choose options and substitutions with the assistance of the program head.

9. Students entering the public or private sectors of human services will be subjected to criminal background and sex offender registry checks and a TB screening as a condition of their placement in a training/practicum site. Students will be expected to cover any costs incurred for these procedures. Depending on the training/practicum site additional tests may be required. Plan accordingly. This may also be required as a condition of employment.

10. Students who have current certifications in First Aid and Safety and CPR (Child or Adult) can use these to fulfill the two credit HLT/PE elective requirement. The original cards must be presented to the faculty advisor. Students planning to transfer to four-year programs should choose options and substitutions with the assistance of the program head.

11. Students planning to pursue 4 year degrees are encouraged to take a course in History, Economics or Political Science.

12. Students who have strong computer skills may seek to satisfy this requirement by CLEP.

13. The social science elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY, and SOC.

14. Students who are 18 years of age or younger will not be able to secure an internship. Should students be unable to secure an internship, they will be unable to complete the requirements of the Human Services degree and therefore be unable to graduate.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
## Purpose
Human Services is a rapidly growing career area with a broad range of applications. Graduates will be able to work in the fields of social services, substance abuse, criminology, corrections, and residential forensic settings. Students will function effectively in a variety of therapeutic, corrections and rehabilitative activities.

## Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

### Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HMS 100 Introduction to Human Services</td>
<td>3</td>
<td>See Notes 1, 2 and 3.</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 100 Survey of Criminal Justice or ADJ 105 The Juvenile Justice System</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HMS/MEN/ ADJ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics/Science Elective</td>
<td>3</td>
<td>MTH 120, MTH 158, MTH 163, MTH 170, BIO 101, CHM 101, CHM 111, PHY 101, PHY 201. See Note 6.</td>
</tr>
<tr>
<td>MEN 101 Mental Health Skill Training I</td>
<td>3</td>
<td>HMS121, See Notes 1, 3 and 4.</td>
</tr>
<tr>
<td>PSY 200 Principles of Psychology</td>
<td>3</td>
<td>See Note 6.</td>
</tr>
<tr>
<td>ADJ 107 Survey of Criminology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSY 215 Abnormal Psychology</td>
<td>3</td>
<td>SOC 268, PSY 230</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 251 Substance Abuse I</td>
<td>3</td>
<td>HMS 258, ADJ 228</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Notes 6 and 7.</td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>3</td>
<td>See Note 12.</td>
</tr>
<tr>
<td>MEN 102 Mental Health Skill Training II</td>
<td>3</td>
<td>HMS 227, MEN 198. See Notes 1, 4 and 5.</td>
</tr>
<tr>
<td>ADJ 211 Criminal Law, Evidence and Procedures I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
<td>See Notes 6 and 11.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Science Elective</td>
<td>3</td>
<td>See Note 13.</td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>2</td>
<td>See Note 8.</td>
</tr>
<tr>
<td>MEN 190 Coordinated Practice</td>
<td>3</td>
<td>MEN 290. See Notes 1, 5, 9, 10 and 14.</td>
</tr>
<tr>
<td>MEN 196 On-Site Training</td>
<td>3</td>
<td>MEN 296. See Notes 1, 5, 9, 10 and 14.</td>
</tr>
<tr>
<td>ADJ 212 Criminal Law, Evidence and Procedures II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
<td>ENG 112 is highly recommended. See Note 6.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>66</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Notes and Additional Curriculum Options
1. Students must obtain a grade of “C” or better in the human services sequence courses (HMS 100, MEN 101, and MEN 102) in order to remain in the program.
2. Students must complete all developmental coursework before enrolling in HMS 100.
3. Students must complete HMS 100 with a grade of “C” or better prior to enrolling in MEN 101.
4. Students must complete MEN 101 with a grade of “C” or better prior to enrolling in MEN 102.
5. MEN 102 must be taken prior to enrolling in MEN 190 and MEN 196 or MEN 290 and 296. MEN 190 and MEN 196 are co requisites and must be taken in the same semester. In these courses, students will complete 100 hours of practical hands-on training. Students will secure their own internship sites prior to the start of their MEN 190 and MEN 196 classes or their MEN 290 and MEN 296 classes. All internships must be approved by the Human Services and Mental Health program chair.

continued
6. Full and part-time students desiring to transfer to four-year programs should consult with their academic advisors for appropriate mathematics, psychology and general elective courses. In addition, students should consult their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

7. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See website (http://www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.

8. Students who have current certifications in First Aid and Safety and CPR (Child or Adult) can use these to fulfill the two credit HLT/PE elective requirement. The original cards must be presented to the faculty advisor.

9. Students entering the public or private sectors of human services will be subjected to criminal background and sex offender registry checks and a TB screening as a condition of their placement in a training/practicum site. Students will be expected to cover any costs incurred for these procedures. Depending on the training/practicum site, additional tests may be required. Plan accordingly. This may also be required as a condition of employment.

10. Students who are convicted felons or are on the sex offender registry in any state will not be able to secure internship sites. This will prevent them from completing requirements for the Human Services degrees and certificates.

11. Students planning to pursue 4 year degrees in Criminology will need a course in History, Economics or Political Science.

12. Students who have strong computer skills may seek to satisfy this requirement by CLEP.

13. The social science elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY, and SOC.

14. Students who are 18 years of age or younger will not be able to secure an internship. Should students be unable to secure an internship, they will be unable to complete the requirements of the Human Services degree and therefore be unable to graduate.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Human Services, Pre-Social Work Specialization

Associate of Applied Science (A.A.S.)

Purpose
Human services is a rapidly growing career area with a broad range of applications. Graduates will be able to work in a variety of mental health and social services fields. Students will be able to function effectively in therapeutic, medical, residential and rehabilitative settings. This specialization is also designed for students who plan to pursue a bachelor’s degree in social work degree.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HMS 100 Introduction to Human Services</td>
<td>3</td>
<td>See Notes 1, 2, 3, 16.</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
<td>SOC 201, SOC 202</td>
</tr>
<tr>
<td>BIO 101 General Biology I</td>
<td>4</td>
<td>See Note 12.</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td>3</td>
<td>See Note 10.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEN 101 Mental Health Skill Training I</td>
<td>3</td>
<td>See Notes 1, 3, 4, 16.</td>
</tr>
<tr>
<td>PSY 200 Principles of Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics/Science Elective</td>
<td>3</td>
<td>See Note 13.</td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIO 102 General Biology II</td>
<td>4</td>
<td>See Note 12.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 251 Substance Abuse I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEN 102 Mental Health Skill Training II</td>
<td>3</td>
<td>See Notes 1, 4, 6, 16.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 8.</td>
</tr>
<tr>
<td>PSY 230 Developmental Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
<td>See Note 11.</td>
</tr>
<tr>
<td>SOC 211</td>
<td>3</td>
<td>SOC 212</td>
</tr>
<tr>
<td>Total Credits</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEN 190 Coordinated Practice</td>
<td>3</td>
<td>MEN 290. See Notes 1, 5, 7 and 20.</td>
</tr>
<tr>
<td>MEN 196 On-Site Training</td>
<td>3</td>
<td>MEN 296. See Notes 1, 5, 7 and 20.</td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHI Ethics</td>
<td>3</td>
<td>See Note 17.</td>
</tr>
<tr>
<td>Foreign Language 101 Course</td>
<td>4</td>
<td>ARA 101, FRE 101, SPA 101. See Note 15.</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits For Program 66

Notes and Additional Curriculum Options

Notes and Additional Curriculum Options
1. Students must obtain a grade of “C” or better in the following core courses in order to remain in the Human Services program: HMS 100, MEN 101, MEN 102, MEN 190 and MEN 290 and MEN 296. Students who plan to transfer to VCU School of Social Work must earn grades of “B” or better in HMS 100, MEN 101, MEN 102 (see note 16).
2. It is recommended that students complete all developmental coursework before enrolling in HMS 100.
3. Students must complete HMS 100 prior to enrolling in MEN 101. Students who plan to transfer to VCU School of Social Work must enroll in a Social Work designated section of HMS 100 and earn a minimum grade of “B” (see note 16).
4. Students must complete MEN 101 prior to enrolling in MEN 102 (see note 16).
5. MEN 102 must be completed prior to enrolling in MEN 190/MEN 290 and MEN 196/MEN 296 (see note 16).
6. Students who are not planning to transfer to VCU may take MEN 198 or MEN 225 in place of MEN 102.
7. MEN 190 and MEN 196 and MEN 290 and MEN 296 are corequisites and must be taken in the same semester. These courses are internships and students (under professional supervision) engage in practical hands-on training consisting of 100 hours in outside agencies. Students will secure their own internship sites prior to the start of their MEN 190 and MEN 196 classes or their MEN 290 and MEN 296 classes. All internships must be approved by
the Human Services and Mental Health Program chair. Students completing an internship in human services will be subjected to criminal background check as well as, sex offender registry checks and a TB screening as a condition of their placement in a training/internship site. Students will be expected to cover any costs incurred for these procedures. This may also be required as a condition of employment. Students who are convicted felons or are on the sex offender registry in any state may not be able to secure training/internship sites. This in turn, will prevent them from completing the requirements for the Human Services degrees and certificates (see note 1).

8. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.

9. Students who plan to transfer to VCU School of Social Work will require PSY 200 for transfer.
10. Students who plan to transfer to VCU School of Social Work will require an ECO, HIS, or PLS course for transfer.
    All other students can consider the following social science electives with the following prefixes: ECO, GEO, HIS, PLS, PSY, or SOC. It is recommended that students select electives with the assistance of their advisors.

11. Students who plan to transfer to VCU will require ENG 210 Advanced Composition.
12. Students who do not plan to transfer to VCU may take other laboratory science courses in place of BIO 101 and 102. These include: BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241 and PHY 242.
13. Math/Science elective requirement can be satisfied by completing MTH 120, MTH 158, MTH 163 or MTH 170 or BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, PHY 101 or PHY 102. Students who plan to transfer to VCU School of Social Work will require MTH 158, MTH 163 or MTH 170 for transfer.

14. Part-time students should consult their faculty advisors regarding appropriate course sequences.
15. Students who plan to transfer to VCU School of Social Work will require a foreign language at the 101 level. Students should consult with their advisors about appropriate language courses.

16. Additional requirements for Transfer to VCU School of Social Work. Students who plan to transfer to VCU School of Social Work must have a minimum cumulative GPA of 2.5 and earn grades of “B” or better in the following core courses: HMS 100, MEN 101, and MEN 102.

17. Choose one course from the following PHI Ethics options: PHI 220, 225, or 226.
18. Students who plan to transfer to VCU School of Social Work must complete a Letter of Interest after successfully completing 15 credits toward the Pre-Social Work Specialization degree at John Tyler Community College and send it to the Office of Undergraduate Admissions at VCU.

19. This Specialization is in part for Human Services students and for students who plan to transfer to the School of Social Work at Virginia Commonwealth University. Students who are interested in completing bachelor’s degrees in social work at other four-year colleges and universities should confer with their advisors before pursuing this program.

20. Students who are 18 years of age or younger will not be able to secure an internship. Should students be unable to secure an internship, they will be unable to complete the requirements of the Human Services degree and therefore be unable to graduate.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Information Technology
Associate of Applied Science (A.A.S.)

**Purpose**
The information technology (IT) degree is designed to meet the rapidly changing workforce needs of business and industry. The curriculum has been designed to prepare students for employment in the business information and computer technology fields. The curriculum allows students to gain an overall understanding of the IT field in addition to pursuing a particular track, which represents an area of interest or specialization. The five tracks are: Cisco network, computer applications, cyber security, network support and program development.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Keyboarding skills are recommended.

**Program Curriculum**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>PHI 111 Logic I</td>
<td>3</td>
<td>PHI 220. See Note 6.</td>
</tr>
<tr>
<td>ENG 115 Technical Writing</td>
<td>3</td>
<td>ENG 111</td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>ITE 130 Introduction to Internet Services</td>
<td>3</td>
<td>See Note 7.</td>
</tr>
<tr>
<td>MTH 158 College Algebra</td>
<td>3</td>
<td>MTH 163</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100 Introduction to Business</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 215 Advanced Computer Applications &amp; Integration</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>ITN 101 Introduction to Network Concepts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITP 100 Software Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IT Track Courses</td>
<td>6/7</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18/19</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
<td>ECO 201, ECO 202</td>
</tr>
<tr>
<td>ECO 120 Survey of Economics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITP 251 Systems Analysis and Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSY 126 Psychology for Business and Industry</td>
<td>3</td>
<td>PSY 100, PSY 200</td>
</tr>
<tr>
<td>IT Track Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 212 Principles of Accounting II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BUS 220 Introduction to Business Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 221 PC Hardware and OS Architecture</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 290 Coordinated Internship</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>IT Track Courses</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 66/67

**Notes and Additional Curriculum Options**

1. ITE 290 represents a one-credit internship that will focus on student’s particular track.
2. All information technology courses must be completed within five years of student’s intended graduation date.
3. Students should consult their faculty advisors regarding appropriate course sequences.
4. Prerequisite requirement(s) must be met for all classes.
5. Students with good computer skills may seek to satisfy this requirement by CLEP.
6. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
7. ITN 261 should be used in place of ITE 130 for students that pursue the Cyber Security Track.
8. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.
9. IT required track courses: continued
Information Technology

<table>
<thead>
<tr>
<th>Track</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cisco Network</strong></td>
<td>ITN 154 Networking Fundamentals - Cisco</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ITN 155 Introductory Routing - Cisco</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 156 Basic Switching and Routing - Cisco</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 157 WAN Technologies - Cisco</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITP Elective Track Course (ITP 110, ITP 120, OR ITP 160)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Computer Applications</strong></td>
<td>ITD 110 Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITD 130 Database Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITD 132 Structured Query Language</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITD 210 Web Page Design II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITE Elective Track Course (ITE 140 OR ITE 150)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Cyber Security Track</strong></td>
<td>ITN 260 Network Security Basics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 262 Network Communication, Security and Authentication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 263 Internet/Intranet Firewalls and E-Commerce Security</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 266 Network Security Layers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 267 Legal Topics in Network Security</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Network Support</strong></td>
<td>ITN 171 Unix I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 111 Server Administration Windows 2008</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 245 Network Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 260 Network Security Basics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITP Elective Track Course (ITP 110, ITP 120, OR ITP 160)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Program Development</strong></td>
<td>ITP 110 Visual Basic Programming I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITP 120 Java Programming I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITP 210 Visual Basic Programming II OR</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITP 220 Java Programming II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ITP 160 Introduction to Game Design and Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITP Elective Track Course (ITN 171, ITN 111, OR ITN 154)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Mechanical Engineering Technology

Associate of Applied Science (A.A.S.)  

Program Curriculum

1st Semester  
- CAD 151 Engineering Drawing Fundamentals I 3  
- ELE 150 A.C. and D.C. Circuit Fundamentals 4  
- ITE 115 Introduction to Computer Applications and Concepts 3  
- MEC 113 Materials and Processes of Industry 3  
- MTH 103 Applied Technical Mathematics I 3  
- SDV 100 College Success Skills 1  
- **Total Credits**: 17

2nd Semester  
- CAD 152 Engineering Drawing Fundamentals II 3  
- ELE 159 Electrical Motors 3  
- MEC 101 Introduction to Engineering Technology I 2  
- MEC 102 Introduction to Engineering Technology II 2  
- MTH 104 Applied Technical Mathematics II 3  
- Humanities Elective 3  
- **Total Credits**: 16

3rd Semester  
- CAD 241 Parametric Solid Modeling I 3  
- ENG 111 College Composition I 3  
- MEC 131 Mechanics I – Statics for Engineering Technology 3  
- MEC 211 Machine Design I 4  
- Health/Physical Education Elective 1  
- Laboratory Science Elective 4  
- **Total Credits**: 18

4th Semester  
- MEC 270 Computations for Engineering Technology 3  
- MEC 132 Mechanics II – Strength of Materials for Engineering Technology 3  
- MEC 212 Machine Design II 4  
- MEC 266 Applications of Fluid Mechanics 3  
- Social/Behavioral Science Elective 3  
- **Total Credits**: 16

**Total Credits For Program**: 67

Notes and Additional Curriculum Options

1. Students with good computer skills may seek to satisfy this requirement by CLEP.
2. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
3. The laboratory science requirements can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, and PHY 242.
4. The social/behavioral science elective requirement can be satisfied by courses with the following prefixes: GEO, HIS, PLS, PSY and SOC.
5. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on specific program objectives, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
# Mechanical Engineering Technology, Mechatronics Technician Specialization

## Associate of Applied Science (A.A.S.)

### Purpose
This program prepares students to work as technicians in the field of mechanical-electrical manufacturing. Graduates will be able to specify maintenance processes, solve problems in fabrication, and troubleshoot mechanical processes.

### Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

### Program Curriculum

#### 1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 151 Engineering Drawing Fundamentals I</td>
<td>3</td>
<td>CAD 201</td>
</tr>
<tr>
<td>ELE 150 A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEC 113 Materials and Processes of Industry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 103 Applied Technical Mathematics I</td>
<td>3</td>
<td>MTH 163, MTH 166</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td>SDV 101 or equivalent</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### 2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEC 140 Introduction of Mechatronics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE 159 Electrical Motors</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>MEC 101 Introduction to Engineering Technology I</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MEC 102 Introduction to Engineering Technology II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MTH 104 Applied Technical Mathematics II</td>
<td>3</td>
<td>MTH 164, MTH 173</td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### 3rd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 241 Parametric Solid Modeling I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE 239 Programmable Controllers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEC 230 Mechatronics Process Control</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEC 211 Machine Design I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### 4th Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 240 Advanced Programmable Logic Controllers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEC 212 Machine Design II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MEC 266 Applications of Fluid Mechanics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEC 270 Computations for Engineering Technology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 66

### Notes and Additional Curriculum Options

1. The social/behavioral science elective requirement can be satisfied by courses with the following prefixes: ECO, GEO, HIS, PLS, PSY and SOC.
2. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humaniteselectives) for a list of approved conceptual and applied humanities electives.
3. Students with good computer skills may seek to satisfy this requirement by CLEP
4. Transfer to Four-Year Colleges and Universities - This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on specific program objectives, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Nursing
Associate of Applied Science (A.A.S.)

Purpose
The JTCC Nursing Program prepares individuals to enter the registered nursing profession and teaches students to deliver quality patient care. At the conclusion of the program, the student will:

1. Patient-Centered Care
   Outcome: Provide quality, safe, patient-centered nursing care through evidence-based practice to diverse populations across the lifespan.

2. Quality Improvement and Safety
   Outcome: Participate in patient safety through understanding system effectiveness and individual performance.

3. Clinical Judgment
   Outcome: Implement effective clinical judgment based on evidence-based nursing practice that promotes the health of patients, families and the community.

4. Professionalism
   Outcome: Integrate management principles and legal/ethical standards of care into the professional nursing role.

5. Informatics and Technology
   Outcome: Incorporate data, technology and information management systems to communicate, decrease error and support clinical judgment.

6. Teamwork and Collaboration
   Outcome: Collaborate effectively with members of the interprofessional team and the patient/family to provide safe, effective and coordinated care.

Program Requirements and Special Conditions
1. High school diploma or equivalent must be documented.
2. Satisfactory scores on college placement tests in English and mathematics.

Tracks Available

Traditional Track: Typical classroom sessions are Monday through Friday during the day. Clinicals may be days, evenings and/or weekends.

Hybrid Distance Education Track (HDET): Theory is delivered in a virtual format. Blackboard Collaborate is used for course meetings and office hours. Faculty may require mandatory on-campus activities and/or mandatory Blackboard Collaborate participation. Clinicals may be days, evenings, and/or weekends.

General Requirements
1. Detailed information for interested applicants is located at www.jtcc.edu/nursing.
2. Students must be able to fulfill all essential functions as outlined in the program participation. Clinicals may be days, evenings, and/or weekends.

3. Applicants must have an overall GPA of at least 2.0 from previous coursework and a curricular GPA of at least 2.5 to be considered for admission. The admission process is competitive and selective. Official transcripts of both high school and college records must be on file in the Admissions and Records office in order for a student to be considered for admission.

4. Math, science and ITE courses have specific time limits.

5. Math, science and ITE courses have specific time limits.

6. All accepted students must submit to a criminal background check, drug screening and physical examination with immunizations as indicated. Additional testing may be required. See Nursing Handbook for additional information. Evidence of hepatitis-B vaccination or declination statement must be provided. Results of screenings must be available and evaluated as satisfactory by the dates given each semester. Students who fail to meet this requirement will not be allowed to begin the program.

7. Applicants must have an overall GPA of at least 2.0 from previous coursework and a curricular GPA of at least 2.5 to be considered for admission. The admission process is competitive and selective. Official transcripts of both high school and college records must be on file in the Admissions and Records office in order for a student to be considered for admission.

8. Students must maintain a 2.0 GPA to be eligible to continue in the Nursing Program and may not have more than two attempts at any course. Students cannot remain in the program if they fail two (2) nursing courses. Students must submit a copy of test results with application.

9. Students are responsible for additional expenses mandated by the program and these include, but are not limited to: course materials, uniforms, lab kits, nursing equipment, current computer and electronic tablet, hardware, software and internet. Expenses associated with the acceptance process are the burden of the student including, but not limited to: the criminal background check, drug screening, physical examination, etc.

10. Students may wish to consider the purchase of accident insurance and personal health insurance due to the inherent risk of exposure to disease. John Tyler Community College does not assume responsibility for accidents/incidents which occur in the clinical setting nor does it provide any student health services. The student assumes financial responsibility for accidents/incidents requiring medical attention.

11. Students must attend a mandatory Information Session within six months of submitting an application. The dates for the session are posted each semester on the website.

12. Students must attend a mandatory Information Session within six months of submitting an application. The dates for the session are posted each semester on the website.

continued
Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 141 Human Anatomy &amp; Physiology I</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 158 College Algebra</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSY 230 Developmental Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 142 Human Anatomy &amp; Physiology II</td>
<td>4</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>NUR 111 Nursing I</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>NUR 226 Health Assessment</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 221 Second-Level Nursing Principles and Concepts I</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 245 Maternal/Newborn Nursing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>NUR 246 Parent/Child Nursing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>NUR 247 Psychiatric Mental Health Nursing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HLT 143 Medical Terminology I or HLT 230 Principles of Nutrition and Human Development</td>
<td>3</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>1</td>
<td>See Note 2.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 223 Second-Level Nursing Principles and Concepts II</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>NUR 254 Dimensions of Professional Nursing</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>PHI 220. See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>

NOTES AND ADDITIONAL CURRICULUM OPTIONS

1. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See website (http://www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.

2. To satisfy the information technology elective requirement, students should plan to take one credit in an ITE computer course offered at the College. (ITE credits cannot be more than five years old.)

3. A student must have completed BIO 141 and MTH 158 within 10 years prior to acceptance to the Nursing Program.

4. Part-time students should consult their faculty advisors regarding appropriate course sequences.

5. HLT 230 and PHI 220 courses may be required by some four-year universities for those pursuing the B.S.N. Students planning to transfer to VCU should take HLT 230. Students should consult their selected four-year university and their nursing faculty advisor for guidance.

6. Transfer to Four-Year Colleges and Universities – Students should consult their academic advisors and their intended transfer institutions for specific direction in course selection. Required courses for any major at four-year institutions may vary.

7. Students are eligible to apply to the nursing program while enrolled in or after completion of the first semester prerequisites courses.

For additional information on this program, please contact the Nursing Office: 804-622-8700 (Nursing Education Center).
## Technical Studies

### Associate of Applied Science (A.A.S.)

#### Purpose

The technical studies degree is designed to meet the rapidly changing workforce needs of business and industry. Focused on meeting short-term educational needs, the degree can be used as a general or individualized studies degree to enhance the education and training of current employees or to ensure basic technical and general work-based skills for new employees. The curriculum allows employers and employees to develop specific plans of study negotiated with, and approved by, appropriate college faculty and administrators.

#### Program Requirements and Special Conditions

Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Work-based learning is a required component of the program. Students without current or recent work experience are responsible for securing their own internships, assisted by JTCC faculty. Students with current or recent work experience are responsible for working with the faculty advisor to secure appropriate documentation.

### Program Curriculum

#### 1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>IND 116 Applied Technology</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MTH 103 Applied Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
</tr>
<tr>
<td>Health or Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>CAD 201 Computer Aided Drafting and Design I</td>
<td>3</td>
</tr>
<tr>
<td>SAF 130 OSHA 10</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

#### 2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 115 Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>PSY 126 Psychology for Business and Industry</td>
<td>3</td>
</tr>
<tr>
<td>Microcomputer/Programming/Software Elective</td>
<td>3</td>
</tr>
<tr>
<td>Technical Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### 3rd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 101 Quality Assurance Technology I</td>
<td>3</td>
</tr>
<tr>
<td>IND 197 Cooperative Education</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>Technical Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### 4th Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 137 Team Concepts and Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>IND 297 Cooperative Education</td>
<td>3</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Technical Electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Total Credits For Program**

| Credits | 66 |

### SUGGESTED TECHNICAL COURSES FOR FIELDS OF INTEREST:

#### Heating, Ventilation and Air Conditioning

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR 121 Air Conditioning and Refrigeration I</td>
<td>3</td>
</tr>
<tr>
<td>AIR 122 Air Conditioning and Refrigeration II</td>
<td>3</td>
</tr>
<tr>
<td>AIR 134 Circuits and Controls I</td>
<td>3</td>
</tr>
<tr>
<td>AIR 154 Heating Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ELE 131 National Electrical Code I</td>
<td>3</td>
</tr>
<tr>
<td>ELE 150 A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>Technical Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>
## Industrial Electricity

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 118</td>
<td>Practical Electricity</td>
<td>2</td>
</tr>
<tr>
<td>ELE 137</td>
<td>National Electric Code – Industrial</td>
<td>3</td>
</tr>
<tr>
<td>ELE 150</td>
<td>A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ELE 156</td>
<td>Electrical Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ELE 159</td>
<td>Electrical Motors</td>
<td>3</td>
</tr>
<tr>
<td>ELE 239</td>
<td>Programmable Logic Controllers</td>
<td>3</td>
</tr>
<tr>
<td>ELE 240</td>
<td>Advanced Programmable Controllers</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

## Mechanical Maintenance

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRF 160</td>
<td>Machine Blueprint Reading</td>
<td>3</td>
</tr>
<tr>
<td>ELE 150</td>
<td>A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ELE 159</td>
<td>Electrical Motors</td>
<td>3</td>
</tr>
<tr>
<td>MEC 113</td>
<td>Materials and Processes of Industry</td>
<td>3</td>
</tr>
<tr>
<td>MEC Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MEC 154</td>
<td>Mechanical Maintenance I</td>
<td>3</td>
</tr>
<tr>
<td>MEC 254</td>
<td>Mechanical Maintenance II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

## Precision Machining Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 121</td>
<td>Computer Numerical Control I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 122</td>
<td>Numerical Controls II</td>
<td>3</td>
</tr>
<tr>
<td>MAC 161</td>
<td>Machine Shop Practices I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 162</td>
<td>Machine Shop Practices II</td>
<td>3</td>
</tr>
<tr>
<td>MAC 163</td>
<td>Machine Shop Practices III</td>
<td>3</td>
</tr>
<tr>
<td>MAC 164</td>
<td>Machine Shop Practices IV</td>
<td>3</td>
</tr>
<tr>
<td>MAC 123</td>
<td>Numerical Control III</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

## Precision Machining Computer Numerical Control (CNC)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 121</td>
<td>Computer Numerical Control I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 122</td>
<td>Computer Numerical Control II</td>
<td>3</td>
</tr>
<tr>
<td>MAC 134</td>
<td>CMM Operation and Programming</td>
<td>2</td>
</tr>
<tr>
<td>MAC 130</td>
<td>Introduction to Electric Discharge Machining</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

## Residential Electricity

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 110</td>
<td>Home Electric Power</td>
<td>3</td>
</tr>
<tr>
<td>ELE 118</td>
<td>Practical Electricity</td>
<td>2</td>
</tr>
<tr>
<td>ELE 127</td>
<td>Residential Wiring Methods</td>
<td>3</td>
</tr>
<tr>
<td>ELE 131</td>
<td>National Electrical Code I</td>
<td>3</td>
</tr>
<tr>
<td>ELE 138</td>
<td>National Electrical Code Review I</td>
<td>3</td>
</tr>
<tr>
<td>ELE 150</td>
<td>A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ELE 151</td>
<td>Electrical Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>
### Welding

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL 150 Welding Drawing Interpretation</td>
<td>2</td>
</tr>
<tr>
<td>WEL 123 Shielded Metal Arc Welding (Basic)</td>
<td>3</td>
</tr>
<tr>
<td>WEL 130 Inert Gas Welding</td>
<td>3</td>
</tr>
<tr>
<td>WEL 250 Welding Quality Control &amp; Inspection</td>
<td>3</td>
</tr>
<tr>
<td>WEL 160 Gas Metal Arc Welding</td>
<td>3</td>
</tr>
<tr>
<td>WEL 175 Semi-Automatic Processes</td>
<td>3</td>
</tr>
<tr>
<td>WEL 141 Welder Qualification Tests I</td>
<td>3</td>
</tr>
<tr>
<td>Technical Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total** 21

### NOTES AND ADDITIONAL CURRICULUM OPTIONS

1. Students with good computer skills may seek to satisfy this requirement by CLEP.
2. Any 100-level math course.
3. The technical elective requirement can be satisfied by courses with the following prefixes: AIR, ARC, CAD, DRF, EGR, ELE, IND, INS, MAC, MEC, SAF or WEL. Selection must be approved in advance by the faculty advisor.
4. The information systems technology elective requirement can be satisfied by appropriate computer-related courses with the following prefixes: ARC, CAD, DRF, EGR, ITD, ITE, ITN, ITP or MAC. Selection must be approved in advance by the advisor.
5. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
6. Part-time students should consult their faculty advisors regarding appropriate course sequences.
7. The social/behavioral sciences elective requirements can be satisfied by courses with the following prefixes: PSY, SOC, ECO, GEO, PLS and HIS.
8. Transfer to Four-Year Colleges and Universities – This program is not intended for transfer. Students desiring to transfer should consult their academic advisors and their intended transfer institutions for specific direction in program and course selection. Required courses for any major at four-year institutions may vary.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
This section provides a listing of John Tyler Community College's certificate programs. The College's programs are subject to change. For an updated list, please visit the College's web site at www.jtcc.edu/academics.
Building Construction
Certificate (C)

Purpose
Graduates with certificates in building construction will be able to: (1) evaluate a building design using building codes and zoning regulations; (2) perform basic surveying operations; (3) perform tests on materials such as concrete, metals and wood; and (4) produce a representative set of working drawings for a small building using computer-aided drafting software.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 121 Architectural Drafting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ARC 221 Architectural CAD Applications Software I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIV 171 Surveying I</td>
<td>3</td>
<td>GIS 101</td>
</tr>
<tr>
<td>MTH 103 Applied Technical Mathematics I</td>
<td>3</td>
<td>MTH 115, MTH 163, MTH 273</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Technical Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 122 Architectural Drafting II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ARC 246 Materials and Methods of Construction</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ARC 258 Building Codes, Contract Documents and Professional Office Practices</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health/Physical Education Elective</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 31

Notes and Additional Curriculum Options
1. The technical elective requirement can be satisfied by courses with the following prefixes: AIR, ARC, CAD, ELE, EGR, IND, MAC, MEC or WEL.
2. Part-time students should consult their faculty advisors regarding appropriate course sequences.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Child Care

Certificate (C)

Purpose
This program provides students with opportunities to develop and improve skills necessary to work with children from birth to age 12 in a variety of child-care settings. Graduates with certificates in child care will be able to: (1) use professional terminology for effective communication; (2) implement instruction for children; (3) analyze and resolve problems; (4) use good human relations skills; (5) analyze specific early childhood scenarios, and plan specific action; (6) apply appropriate computer skills; (7) apply appropriate basic child/classroom observational skills; and (8) locate, compile and analyze appropriate resources, activities and materials.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Students entering the public or private sectors of early childhood may be subject to criminal background and sex offender registry checks and a TB screening as a condition of their placement in a training practicum site. Students will be expected to cover any and all costs incurred for these procedures. This may also be required as a condition of employment.

Program Curriculum

1st Semester Credits Standard Course Options
CHD 120 Introduction to Early Childhood Education 3
CHD 145 Methods and Materials for Teaching Art, Music and Movement to Children 3
CHD 165 Observation and Participation in Early Childhood/Primary Settings 3
ENG 111 College Composition I 3
HLT 106 First Aid and Safety 2
Information Technology Elective 1
SDV 100 College Success Skills 1
Total Credits 16

2nd Semester Credits Standard Course Options
CHD 118 Methods and Materials in the Language Arts for Children 3
CHD 146 Methods and Materials for Teaching Math, Science and Social Studies to Children 3
CHD 205 Guiding the Behavior of Children 3
CHD 216 Early Childhood Programs, School, and Social Change 3
CHD 270 Administration of Early Childhood Programs 3
CHD 265 Advanced Observation and Participation in Early Childhood/Primary Settings 3
Total Credits 18

Total Credits For Program 34

Notes and Additional Curriculum Options
1. Coordinated Practice I and II are practicum courses and require placement in approved activities by the program head.
2. Part-time students should consult their faculty advisors regarding appropriate course sequences.
3. Students who have current certifications in First Aid and Safety and CPR (Child or Adult) can use these to fulfill the two credit HLT 106 requirement. The original cards must be presented to the Admissions and Records office. No online First Aid/CPR cards will be accepted for credit at JTCC.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Fine Arts
Certificate (C)

Purpose
This program provides a coherent set of university parallel courses corresponding to the first year of art foundation study. It is intended for students who plan to transfer into a baccalaureate degree program in the visual arts. The program may be applied toward majors in art education, art history, crafts, fashion design, filmmaking, graphic design, illustration, interior design, museum studies, painting, photography, printmaking, sculpture and other art-related fields. It also helps students develop the fundamental knowledge and skills necessary for careers in art and design.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101 History and Appreciation of Art I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 111 Introduction to the Arts I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 121 Drawing I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 131 Fundamentals of Design I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 102 History and Appreciation of Art II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 122 Drawing II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 132 Fundamentals of Design II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 133 Visual Arts Foundation</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 287 Portfolio and Resume Preparation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>See Note 2.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** **32**

Notes and Additional Curriculum Options
1. Part-time students should consult their faculty advisors regarding appropriate course sequences.
2. Students must develop a transfer portfolio during their last semester of study.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester Campus) or 804-594-1509 (Midlothian Campus).
General Education

Certificate (C)

Purpose
This program provides students with a coherent set of university parallel courses corresponding to the first year of study at a four-year college or university. It is intended for students who plan to transfer into a baccalaureate program after completing the equivalent of one year of full-time study at the community college. The program addresses many of the general education requirements at senior institutions and is most appropriate for individuals who anticipate majoring in fields in the humanities, sciences, and mathematics.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIS 121 United States History I</td>
<td>3</td>
<td>HIS 101, HIS 111</td>
</tr>
<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
<td>3</td>
<td>MTH 170, MTH 173</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIS 122 United States History II</td>
<td>3</td>
<td>HIS 102, HIS 112</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Social/Behavioral Science or Humanities Elective</td>
<td>3</td>
<td>See Notes 1 and 2.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 32

Notes and Additional Curriculum Options
1. The social/behavioral sciences elective requirements can be satisfied by courses with the following prefixes: ECO, GEO, PLS, HIS, PSY and SOC.
2. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
3. The laboratory science requirement can be satisfied by the following courses: BIO 101, BIO 102, BIO 110, BIO 120, CHM 101, CHM 102, CHM 111, CHM 112, ENV 121, ENV 122, GOL 105, NAS 125, PHY 101, PHY 102, PHY 150, PHY 201, PHY 202, PHY 241, PHY 242.
4. Students should consult their faculty advisors or transfer college for advice regarding the selection of the most appropriate electives.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
Precision Machining Technology
Certificate (C)

Purpose
This program provides workforce readiness skills for a career in advanced manufacturing and/or manual machining. It is the recommended curriculum for machinist apprentices as identified by the Virginia Department of Labor and Industry. The curriculum is based on the standards of the National Institute for Metalworking Skills, Inc. (NIMS) with the opportunity to earn Level I industry credentials for manual and CNC.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td>9</td>
<td>DRF 128 Geometric Dimensioning and Tolerancing 2, MAC 161 Machine Shop Practices I 3, MTH 103 Applied Technical Mathematics 3, SDV 100 College Success Skills 1</td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
<td>12</td>
<td>MAC 121 Computer Numerical Control I 3, PSY 126 Psychology for Business and Industry 3, MAC 162 Machine Shop Practices II 3, Precision Machining Technology Elective 3</td>
</tr>
<tr>
<td><strong>4th Semester</strong></td>
<td>8</td>
<td>MAC 164 Machine Shop Practices IV 3, MAC 123 Computer Numerical Control III 3, MAC 130 EDM and CAM 2</td>
</tr>
<tr>
<td>Total Credits For Program</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Notes and Additional Curriculum Options
1. Part-time students should consult their faculty advisors regarding course sequences.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Welding
Certificate (C)

Purpose
The certificate in welding prepares students for work as an apprentice welder. The Welding Program is accredited by the American Welding Society (AWS) Schools Excelling through National Skills Standards Education (SENSE) program.

Program Requirements and Special Conditions
This program has a limited enrollment. Students must provide their own personal protection safety equipment. Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

1st Semester
- WEL 150 Welding Drawing and Interpretation 2
- MTH 103 Applied Technical Mathematics I 3
- SDV 100 College Success Skills 1
- WEL 116 Oxyfuel Welding 2
- SAF 130 OSHA-10 1
- WEL 123 Shielding Metal Arc Welding (Basic) 3
Total Credits 12

2nd Semester
- WEL 250 Welding Quality Control & Inspection 3
- WEL 130 Insert Gas Welding 3
- WEL 160 Gas Metal Arc Welding 3
Total Credits 9

3rd Semester
- ENG 115 Technical Writing 3
- WEL 175 Semi-Automatic Processes 3
- PSY 126 Psychology for Business and Industry 3
Total Credits 9

4th Semester
- WEL 124 Shielded Metal Arc Welding (Advanced) 3
- WEL 141 Welder Qualification Tests I 3
Total Credits 6

Total Credits For Program 36

Notes and Additional Curriculum Options
1. Part-time students should consult their faculty advisors regarding appropriate course sequences.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Career Studies Certificates

This section provides a listing of John Tyler Community College’s career studies certificate programs. The College’s programs are subject to change. For an updated list, please visit the College’s web site at www.jtcc.edu/academics.
Accounting
Career Studies Certificate (C.S.C.)

**Purpose**
Provides skills for entry-level work and advancement with accounting departments.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in mathematics, and scores will be used for appropriate course placement. If students have deficiencies in mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACC 261 Principles of Federal Taxation I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 212 Principles of Accounting II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Accounting Elective</td>
<td>3</td>
<td>BUS 241</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>3rd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 221 Intermediate Accounting I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ACC 231 Cost Accounting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>4th Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 215 Computerized Accounting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACC 222 Intermediate Accounting II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 26

**Notes and Additional Curriculum Options**
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Adult Home Administration

Career Studies Certificate (C.S.C.)

**Purpose**
For students who are currently working in or wish to pursue employment in adult home facilities. This program fulfills some of Virginia’s requirements for certification in Adult Home Administration.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English, and scores will be used for appropriate course placement. If students have deficiencies in English, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Persons entering the public or private sectors of human services will be subjected to criminal background and sex offender registry checks, as well as a TB screening as a condition of their placement in a training/practicum site. Students will be expected to cover any costs incurred for these procedures. These tests will be required as a condition of employment.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 100 Introduction to Human Services</td>
<td>3</td>
<td>SOC 246, PSY 116</td>
</tr>
<tr>
<td>HMS 106 Working with Death and Dying</td>
<td>3</td>
<td>MEN 121, MEN 122</td>
</tr>
<tr>
<td>HMS 236 Gerontology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 225 Functional Family Intervention</td>
<td>3</td>
<td>HMS 250, SOC 215, SOC 268</td>
</tr>
<tr>
<td>MEN 101 Mental Health Skill Training I</td>
<td>3</td>
<td>HMS 121, MEN 198</td>
</tr>
<tr>
<td>MKT 100 Principles of Marketing</td>
<td>3</td>
<td>BUS 111, BUS 165, BUS 200</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEN 102 Mental Health Skill Training II</td>
<td>3</td>
<td>HMS 227, MEN 198, HMS 225</td>
</tr>
<tr>
<td>MEN 190 Coordinated Practice</td>
<td>3</td>
<td>MEN 290. See Notes 3 and 4.</td>
</tr>
<tr>
<td>MEN 196 On-Site Training</td>
<td>3</td>
<td>MEN 296. See Notes 3 and 4.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 27

**Notes and Additional Curriculum Options**
1. Students must obtain a grade of “C” or better in the human services sequence courses (HMS 100, MEN 101 and MEN 102) in order to remain in the program.
2. This program is in compliance with State of Virginia requirements for certification in Adult Home Administration.
3. MEN 190 and MEN 196 are corequisites and must be taken in the same semester. All students who plan to pursue a degree or certification in Human Services are required to complete a 100 hour internship. Students will secure their own internship sites prior to the start of their MEN 190 and MEN 196 classes or their MEN 290 and MEN 296 classes. All internships must be approved by the Human Services and Mental Health Program chair.
4. Students who are 18 years of age or younger will not be able to secure an internship. Should students be unable to secure an internship, they will be unable to complete the requirements of the Human Services degree and therefore be unable to graduate.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Advanced Manufacturing Management

Career Studies Certificate (C.S.C.)

**Purpose**
Upgrade skills needed for supervisory positions in a manufacturing setting.

**Program Requirements and Special Conditions**
A high school diploma (or equivalent) and satisfactory scores on college placement tests (or equivalent) in English and mathematics are required. If students have deficiencies in English and/or mathematics, JTCC offers remedial courses to prepare students for the curriculum. Work-based learning is a required component of the program. Students without current or recent related work experience are responsible for securing their own internships, assisted by JTCC faculty. Students with current or related work experience are responsible for working with the faculty advisor to secure appropriate documentation.

**Program Requirements and Special Conditions**
A high school diploma (or equivalent).

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 101 Quality Assurance Technology I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IND 137 Team Concepts &amp; Problem Solving</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IND 181 World Class Manufacturing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 126 Psychology of Business &amp; Industry</td>
<td>3</td>
<td>PSY 200</td>
</tr>
<tr>
<td>BUS 234 Supply Chain Management</td>
<td>3</td>
<td>BUS 266</td>
</tr>
<tr>
<td>IND 250 Introduction to Basic Computer Integrated Manufacturing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 18

**Notes and Additional Curriculum Options**
Part-time students should consult their faculty advisors regarding appropriate course sequences.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Allied Health Preparation, Pre-Funeral Services

Career Studies Certificate (C.S.C.)

Purpose
Provides basic general education and prerequisite courses for students seeking to enroll in the A.A.S. degree program in funeral services. Completion of the career studies certificate does not guarantee admission into the JTCC Funeral Services Program. Students should refer to the admission requirements for the A.A.S. degree in Funeral Services listed in the programs of study section.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. In order to successfully complete the pre-funeral services program and then be considered for admission to the Funeral Services A.A.S. program, students must test out of or complete the equivalent of modules 1, 2, and 3 in mathematics. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 110 Survey of Chemistry</td>
<td>3</td>
<td>CHM 101</td>
</tr>
<tr>
<td>FNS 110 Introduction to Funeral Service</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>HLT 143 Medical Terminology 1</td>
<td>3</td>
<td>HIM 111</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV Elective</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 12

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 211 Principles of Accounting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 101 Introduction to Microcomputers</td>
<td>1</td>
<td>Any ITE Course</td>
</tr>
<tr>
<td>CST 110 Introduction to Communication</td>
<td>3</td>
<td>CST 100, CST 115</td>
</tr>
<tr>
<td>FNS 121 Anatomy for Funeral Service I</td>
<td>3</td>
<td>BIO 141, BIO 145, NAS 161.</td>
</tr>
<tr>
<td>PSY 116 Psychology of Death and Dying</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 13

Total Credits for Program 25

Notes and Additional Curriculum Options
1. Students may seek admission to the funeral services A.A.S. degree program during the semester they will complete all courses in the Pre-Funeral Services curriculum. A student must earn a grade of “C” or better in all courses in the Pre-Funeral Services curriculum and have a 2.5 or better cumulative grade point average to seek admission to the funeral services A.A.S. degree program. The grade point average of courses being accepted for transfer will be calculated for students who wish to have transfer credits considered toward the fulfillment of the Pre-Funeral Services curriculum.

2. Effective Fall 2014, students will be admitted to the Funeral Services Program every fall and every spring semester. Applications will be due by July 1 for the fall semester with notification of acceptance by August 1 and November 1 for the spring semester with notification of acceptance by December 1. Notification of acceptance will be conditioned upon final grade posting and calculation of cumulative grade point average.

For additional information on this program, please contact the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).
### Allied Health Preparation, Pre-Nursing

**Career Studies Certificate (C.S.C.)**

**Purpose**
Provides the basic general education and prerequisite courses for students seeking to apply to nursing programs at most institutions. Completion of the career studies certificate does not guarantee admission into the JTCC nursing program. Students should refer to the nursing program admission requirements found at www.jtcc.edu/nursing.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>BIO 141 Human Anatomy and Physiology I</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td></td>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MTH 158 College Algebra</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td></td>
<td>PSY 230 Developmental Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
<td>BIO 142 Human Anatomy and Physiology II</td>
<td>4</td>
<td>See Note 3.</td>
</tr>
<tr>
<td></td>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HLT 143 Medical Terminology I</td>
<td></td>
<td>HLT 230. See Note 3.</td>
</tr>
<tr>
<td></td>
<td>Humanities Elective</td>
<td>3</td>
<td>PHI 220. See Notes 1 and 3.</td>
</tr>
<tr>
<td></td>
<td>Information Technology Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**

28

**Notes and Additional Curriculum Options**
1. The humanities elective requirement must be satisfied by completing one 3-credit conceptual humanities course that offers breadth of knowledge. Additional humanities electives may be conceptual or applied with a focus on skills, techniques and procedures. See web site (www.jtcc.edu/humanitieselectives) for a list of approved conceptual and applied humanities electives.
2. Students planning to apply for admission to the JTCC Nursing Program must complete BIO 141 or BIO 231, ENG 111, PSY 230, MTH 158 and SDV 100 with a minimum grade of “C” in each course.
3. Students should consult their selected four-year university and their nursing faculty advisor for guidance.
4. If a student does not place into MTH 158, they must successfully complete developmental math courses before enrolling in MTH 158.
5. Students must complete or be enrolled in the first five prerequisites to APPLY to the Nursing Program.

For additional information on this program, please contact the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).
Athletic Coaching

Career Studies Certificate (C.S.C.)

**Purpose**
The program is designed to provide students with the knowledge and skills to coach and assist athletes in a variety of settings and levels of competition, both in scholastic and community settings.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Prior to the clinical portion of the program, students must provide criminal background checks, drug test screenings, and records of physical health from a physician.

Program Curriculum

**1st Semester**
- ENG 111 College Composition 3
- HLT 106 First Aid and CPR 2
- HLT 120 Foundations and Principles of Sports Coaching 3
- RPK 180 Youth Sports Administration 3
- SDV 100 Student Success Skills 1
**Total Credits** 12

**2nd Semester**
- HLT 206 Exercise Science 3
- PSY 230 Developmental Psychology 3
- HLT 156 Health Care for Athletic Injuries 3
- RPK 210 Principles and Psychology of Coaching 3
**Total Credits** 12

**3rd Semester**
- HLT 230 Principles of Nutrition and Human Development 3
- RPK 296 On-Site Training 1
**Total Credits** 4

**Total Credits For Program** 28

Notes and Additional Curriculum Options
1. Satisfactory completion of HLT 106 is a Virginia Coaching Certification requirement.

For additional information on the program, please contact the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).

Basic Precision Machining Technology

Career Studies Certificate (C.S.C.)

**Purpose**
To prepare students for basic precision machining positions.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements.

Program Curriculum

**1st Semester**
- MAC 161 Machine Shop Practices I 3
**Total Credits** 3

**2nd Semester**
- MAC 162 Machine Shop Practices II 3
**Total Credits** 3

**3rd Semester**
- MAC 163 Machine Shop Practices III 3
**Total Credits** 3

**4th Semester**
- MAC 164 Machine Shop Practices IV 3
**Total Credits** 3

**Total Credits For Program** 12

Notes and Additional Curriculum Options
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Bereavement and Grief Counseling

Career Studies Certificate (C.S.C.)

Purpose
Bereavement and grief counseling is one of the fastest growing areas in the human services field. This career studies certificate provides advanced training to those currently working in the human services field and to students who are interested in working in hospice care, AIDS treatment, terminal illness, funeral services, hospitals and long-term care facilities. Students earning a certificate in bereavement and grief counseling will be able to employ the professional techniques of bereavement counseling and grief work, as well as develop an understanding of the emotional, psychological, physical and social aspects of death, dying, loss and grief.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English, and scores will be used for appropriate course placement. If students have deficiencies in English, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Persons entering the public or private sectors of human services will be subjected to criminal background and sex offender registry checks, as well as a TB screening as a condition of their placement in a training/practicum site. Students will be expected to cover any costs incurred for these procedures. These tests will be required as a condition of employment.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 100 Introduction to Human Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HMS 106 Working with Death and Dying</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEN 101 Mental Health Skill Training I</td>
<td>3</td>
<td>HMS 121</td>
</tr>
<tr>
<td>SOC 246 Sociology of Death and Dying</td>
<td>3</td>
<td>PSY 116</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEN 102 Mental Health Skill Training II</td>
<td>3</td>
<td>HMS 227, MEN 198, HMS 225</td>
</tr>
<tr>
<td>MEN 190 Coordinated Practice</td>
<td>3</td>
<td>MEN 290. See Notes 3 and 7.</td>
</tr>
<tr>
<td>MEN 196 On-Site Training</td>
<td>3</td>
<td>MEN 296 See Notes 3 and 7.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** | **21** |

Notes and Additional Curriculum Options
1. Students must obtain a grade of “C” or better in the human services sequence courses (HMS 100, MEN 101 and MEN 102) in order to remain in the program.
2. Students must take HMS 100, HMS 106 and MEN 101 prior to enrolling in the coordinated practice courses MEN 190 and MEN 196.
3. MEN 190 and MEN 196 are corequisites and must be taken in the same semester. All students who plan to pursue a degree or certification in Human Services are required to complete a 100 hour internship. Students will secure their own internship sites prior to the start of their MEN 190 and MEN 196 classes or their MEN 290 and MEN 296 classes. All internships must be approved by the Human Services and Mental Health Program chair.
4. Part-time students should consult their faculty advisors regarding appropriate course sequences.
5. Students entering the public or private sectors of human services will be subjected to criminal background and sex offender registry checks and a TB screening as a condition of their placement in a training/practicum site. Students will be expected to cover any costs incurred for these procedures. This may also be required as a condition of employment.
6. Students who are convicted felons or are on the sex offender registry in any state will not be able to secure internship sites. This will prevent them from completing requirements for the Human Services degrees and certificates.
7. Students who are 18 years of age or younger will not be able to secure an internship. Should students be unable to secure an internship, they will be unable to complete the requirements of the Human Services degree and therefore unable to graduate.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Business Entrepreneurship

Career Studies Certificate (C.S.C.)

Purpose
This program provides students with opportunities to develop and improve skills necessary for success as a business owner. Included in the coursework are activities that enhance analytical, technical, communication, leadership and human relations skills.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English, and scores will be used for appropriate course placement. If students have deficiencies in English, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 116 Entrepreneurship</td>
<td>3</td>
<td>BUS 165</td>
</tr>
<tr>
<td>BUS 125 Applied Business Math</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Intro to Computer Applications</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 236 Communications in Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MKT 100 Principles of Marketing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Restricted Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits for Program</strong></td>
<td><strong>21</strong></td>
<td></td>
</tr>
</tbody>
</table>

Notes and Additional Curriculum Options
1. Students with good computer skills may seek to satisfy this requirement by CLEP.
2. The restricted elective requirement may be satisfied by ACC 211, BUS 205, BUS 241, or any MKT 200-level course.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Business Information Management

Career Studies Certificate (C.S.C.)

**Purpose**
A cross-discipline curriculum designed to provide a foundation in business management and information technology. This career studies certificate program recognizes the blend between information technology skills and business management knowledge and practice. Most managers find technology an integral part of their work, while IT professionals find that information technology specialists require an understanding of the management of both data and people. This is a first-level program for a person who intends to pursue a certificate and/or associate degree in either business or information technology.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English, and scores will be used for appropriate course placement. If students have deficiencies in English, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100: Introduction to Business</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111: College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115: Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Elective</td>
<td>3</td>
<td>BUS 236, BUS 200, BUS 205</td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>3</td>
<td>ITE 140, ITE 150, ITE 215</td>
</tr>
<tr>
<td>Business/Information Technology Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 18

**Notes and Additional Curriculum Options**
1. The business/information technology elective requirement can be satisfied by courses with the following prefixes: BUS, ITD, ITE, ITN or ITP. Selection must be approved by the faculty advisor. When selecting electives, the student must consider the prerequisite courses that apply to some BUS and IT courses.
2. The courses in this career studies certificate program provide foundations in basic business practices and information technology that can be applied to other certificate and degree programs.
3. Students with good computer skills may seek to satisfy this requirement by CLEP.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Child Care Management

Career Studies Certificate (C.S.C.)

Purpose
To prepare experienced child-care providers for positions in child-care management.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information. Students entering the public or private sectors of early childhood may be subject to criminal background and sex offender registry checks and a TB screening as a condition of their placement in a training practicum site. Students will be expected to cover any and all costs incurred for these procedures. This may also be required as a condition of employment.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHD 215 Models of Early Childhood Education Programs</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDU 235 Health, Safety and Nutrition Education</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 200 Principles of Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHD 270 Administration of Early Childhood Programs</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHD 265 Advanced Observation and Participation in Early Childhood/Primary Setting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**  **18**

Notes and Additional Curriculum Options
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Cisco Network

Career Studies Certificate (C.S.C.)

Purpose
This program is designed to prepare individuals for employment in the computer networking field.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English, and scores will be used for appropriate course placement. If students have deficiencies in English, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITN 101 Introduction to Network Concepts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITN 154 Networking Fundamentals-Cisco</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Software Applications</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>10</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITN155 Introductory Routing-Cisco</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>3</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITN 156 Basic Switching and Routing-Cisco</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>3</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITN 157 WAN Technologies-Cisco</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 290 Coordinated Internship</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>20</strong></td>
<td></td>
</tr>
</tbody>
</table>

Notes and Additional Curriculum Options

1. Students with good computer skills may seek to satisfy this requirement by CLEP.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).

Computer-Aided Drafting and Modeling

Career Studies Certificate (C.S.C.)

Purpose
Introduces students to operations and applications of a typical computer-aided drafting system (CAD) and three dimensional modeling of design components. The program is structured to allow draftsmen and designers to update their software skills. Students may choose technical electives focusing on the following disciplines; architectural, civil or mechanical. The civil electives will prepare certificate holders to perform CAD and terrain modeling activities within a civil engineering or survey office. The architectural electives provide building information modeling (BIM) and parametric modeling. The mechanical electives provide students with skills in two dimensional drafting and parametric modeling of machine components.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 201 Computer-Aided Drafting and Design I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Restricted Technical Electives</td>
<td>6</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 202 Computer-Aided Drafting and Design II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Restricted Technical Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>CAD 231 Computer-Aided Drafting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
</tbody>
</table>

Notes and Additional Curriculum Options

1. Students should select two three-credit courses in a single track under the guidance of a faculty advisor. Architectural Track: ARC 221, ARC 222; ARC elective; Civil Terrain Modeling Track: CAD 260, CIV 171, GIS 101; Mechanical (Parametric Modeling) Track: CAD 151, CAD 241, MAC 150. Students should make note of any course pre-requisites within the tracks when choosing course sequences.
## Computer Applications

### Career Studies Certificate (C.S.C.)

**Purpose**
Prepares students for entry-level positions in Web and database microcomputer applications.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in mathematics, and scores will be used for appropriate course placement. If students have deficiencies in mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

### Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 115 Introduction to Computer Software Applications</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>ITD 110 Web Page Design I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 130 Introduction to Internet Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 140 Spreadsheet Software I or ITE 150 Desktop Database Software</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 215 Advanced Computer Applications and Integration</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>ITD 130 Database Fundamentals</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITD 132 Structured Query Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITD 210 Web Page Design II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 290 Coordinated Internship</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**
25

**Notes and Additional Curriculum Options**

1. Students with good computer skills may seek to satisfy this requirement by CLEP.

For additional information on this program, please contact the Division of Engineering, Business and Public Service: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).

## Computer Numerical Control

### Career Studies Certificate (C.S.C.)

**Purpose**
To provide students with computer numerical control techniques in metal forming and machine processes.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements.

### Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 121 Computer Numerical Control I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DRF 128 Geometric Dimensioning and Tolerancing</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>5</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 122 Computer Numerical Control II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MAC 134 CMM Operation and Programming</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>5</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 123 Computer Numerical Control III</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MAC 130 EDM and CAM</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MAC EEE Machine Electives</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>7</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**
17

**Notes and Additional Curriculum Options**
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Criminal Justice

Career Studies Certificate (C.S.C.)

**Purpose**
This program provides students with opportunities to develop and improve skills necessary for success as local, state or federal law enforcement or corrections officers; commercial and industrial security officers and private or government investigators.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English, and scores will be used for appropriate course placement. If students have deficiencies in English, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 100 Survey of Criminal Justice</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 105 The Juvenile Justice System</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 111 Law Enforcement Organization and Administration I or ADJ 245 Management of Correctional Facilities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 211 Criminal Law, Evidence and Procedures I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 227 Constitutional Law for Justice Personnel or ADJ 241 Correctional Law</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 133 Ethics and the Criminal Justice Professional</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 229 Law Enforcement and the Community or ADJ 145 Corrections and the Community</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 236 Principles of Criminal Investigation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program:** 24

**Notes and Additional Curriculum Options**
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).

Cyber Security

Career Studies Certificate (C.S.C.)

**Purpose**
Prepare students for career in computer and networking Cyber Security

**Program Requirements and Special Conditions**
A high school diploma (or equivalent) and satisfactory scores on college placement tests in mathematics (or equivalent) are required. If students have deficiencies in mathematics, JTCC offers developmental courses to prepare students for the curriculum.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITN 101 Introduction to Network Concepts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITN 260 Network Security Basics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITN 261 Network Attacks, Computer Crimes and Hacking</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITN 262 Network Communications, Security and Authentication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITN 263 Internet/Intranet Firewalls and E-Commerce Security</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITN 266 Network Security Layers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITN 267 Legal Topics in Network Security</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 290 Coordinated Internship</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>10</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program:** 22

**Notes and Additional Curriculum Options**
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Early Childhood

Career Studies Certificate (C.S.C.)

Purpose
The curriculum is designed to prepare individuals to work with young children in safe and healthy environments that are supportive of children's individual physical, cognitive and social-emotional development. Occupational opportunities include employment as assistant teachers, teachers, group leaders or family child care providers in programs for young children.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 120 Introduction to Early Childhood Education</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHD 145 Methods and Materials for Teaching Art, Music and Movement to Children</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHD 205 Guiding the Behavior of Children</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>10</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 165 Observation and Participation in Early Childhood/Primary Settings</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDU 235 Health, Safety and Nutrition Education</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>6</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 16

Notes and Additional Curriculum Options
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).

Electricity

Career Studies Certificate (C.S.C.)

Purpose
Introduction to the fundamentals of electrical wiring. Provides the classroom training required by the state to sit for the electrician licensing exam. Provides review of the National Electrical Code.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 131 National Electrical Code 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE 150 A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>7</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 138 National Electrical Code Review</td>
<td>3</td>
<td>ELE 156</td>
</tr>
<tr>
<td>ELE 151 Electrical Troubleshooting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>6</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 13

Notes and Additional Curriculum Options
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Emergency Medical Services – Advanced Emergency Medical Technician

Career Studies Certificate (C.S.C.)

**Purpose**
The purpose of this curriculum is to produce competent entry-level Emergency Medical Technician-Intermediates (EMT-I/99) who can service the community with advanced life support care via the Emergency Medical Services (EMS) infrastructure. Upon completion of the program, students will be eligible for National Registry testing and certification in the Commonwealth of Virginia. Employment opportunities for EMT-Intermediates are available with ambulance, fire and rescue services; hospitals; local, state and federal government agencies; and humanitarian relief organizations. 

**Program Requirements**

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

To be eligible for placement in the program, students are required to have transcripts of previous high school and college courses sent to John Tyler Community College, submit the required health certificate, and have current CPR certification at the Health Care Provider level. Per Virginia OEMS Regulation students must be a minimum of 18 years of age at the beginning of any ALS certification program and hold, at a minimum, a high school or general equivalency diploma.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 101 Orientation to Health Services</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td>EMS 111 Emergency Medical Technician - Basic</td>
<td>7</td>
<td>EMS 112 and EMS 113</td>
</tr>
<tr>
<td>EMS 120 Emergency Medical Technician – Basic Clinical</td>
<td>1</td>
<td>See Note 1.</td>
</tr>
</tbody>
</table>

**Total Credits**

| 9 |

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 151 Introduction to Advanced Life Support</td>
<td>4</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>EMS 152 Advanced Medical Care</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>EMS 170 ALS Internship I</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits**

| 7 |

**Total Credits For Program**

| 16 |

**Notes and Additional Curriculum Options**

1. EMS 120 must be taken concurrently with EMS 111 or EMS 113.
2. Students must pass cognitive and practical capstone assessments to obtain eligibility to test for EMT Certification – EMT Certification is required in order to begin ALS courses.

Students who complete the program must pass cognitive and practical capstone assessments to obtain eligibility to test for Advanced EMT Certification. Students must earn a “B” or better in all EMS-specific courses for eligibility to test for State and/or National Certification.

For additional information on this program, please contact the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).
Emergency Medical Services - Intermediate

Career Studies Certificate (C.S.C.)

Purpose
The purpose of this curriculum is to produce competent entry-level Emergency Medical Technician-Intermediates (EMT-I/99) who can service the community with advanced life support care via the Emergency Medical Services (EMS) infrastructure. Upon completion of the program, students will be eligible for National Registry testing and certification in the Commonwealth of Virginia. Employment opportunities for EMT-Intermediates are available with ambulance, fire and rescue services; hospitals; local, state and federal government agencies; and humanitarian relief organizations.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

To be eligible for placement in the program, students are required to have transcripts of previous high school and college courses sent to John Tyler Community College, submit the required health certificate, and have current CPR certification at the Health Care Provider level.

Per Virginia OEMS Regulation, students must be a minimum of 18 years of age at the beginning of any ALS (Advanced Life Support) certification program and hold, at a minimum, a high school or general equivalency diploma.

Program Curriculum

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 101 Orientation to Health Sciences</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td>EMS 111 Emergency Medical Technician - Basic</td>
<td>7</td>
<td>EMS 112 and EMS 113</td>
</tr>
<tr>
<td>EMS 120 Emergency Medical Technician - Basic Clinical</td>
<td>1</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 151 Introduction to Advanced Life Support</td>
<td>4</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>EMS 152 Advanced Medical Care</td>
<td>2</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>EMS 153 Basic ECG Recognition</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>EMS 170 ALS Internship I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 154 ALS Cardiac Care</td>
<td>2</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>EMS 157 ALS Trauma Care</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EMS 159 ALS Special Populations</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EMS 172 ALS Clinical Internship II</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>EMS 173 ALS Field Internship II</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>10</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** | **28** |

Notes and Additional Curriculum Options
1. EMS 120 must be taken concurrently with EMS 111 or EMS 113.
2. Students must pass cognitive and practical capstone assessments to obtain eligibility to test for EMT Certification – EMT Certification is required in order to begin ALS courses.
3. Students who have completed EMS 155 will receive credit for EMS 152 and 154.
4. Students who complete the program must pass cognitive and practical capstone assessments to obtain eligibility to test for EMT-I Certification.

Students must earn a “B” or better in all EMS-specific courses for eligibility to test for State and/or National Certification.

For additional information on this program, please contact the Division of Mathematics, Natural and Health Sciences: 804-706-5084 (Chester) or 804-594-1500 (Midlothian).
Filmmaking (pending approval)

Career Studies Certificate (C.S.C.)

**Purpose**
For students interested in a career in film and video production. Program coursework allows students to learn techniques specific to digital filmmaking. Course content covers the practice, theory, and history of film and film production, to include screenwriting, acting for the camera, and the effective use of filmmaking technology in the studio and on location. Students are required to complete either a supervised independent study or an internship in the field.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. New students should see a counselor and returning students their advisor for more information.

### Program Curriculum

#### 1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 150 History of Film and Animation</td>
<td>3</td>
</tr>
<tr>
<td>CST 151 Film Appreciation I</td>
<td>3</td>
</tr>
<tr>
<td>PHT 120 Screenwriting</td>
<td>3</td>
</tr>
<tr>
<td>PHT 150 Film Production I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

#### 2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CST 140 Acting for the Camera</td>
<td>3</td>
</tr>
<tr>
<td>PHT 151 Film Production II</td>
<td>3</td>
</tr>
<tr>
<td>PHT 274 Digital Film Editing and Post Prod</td>
<td>3</td>
</tr>
<tr>
<td>PHT 296 Filmmaking Internship</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

**NOTES AND ADDITIONAL CURRICULUM OPTIONS**

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).

Geographic Information Systems

Career Studies Certificate (C.S.C.)

**Purpose**
To provide an introduction to the concepts of Geographic Information Systems (GIS), Global Positioning Systems (GPS) and remote sensing components of Geospatial Technology. The curriculum provides applications of the technology to site development, business and security.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements.

### Program Curriculum

#### 1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS 101 Introduction to Geospatial Technology</td>
<td>3</td>
</tr>
<tr>
<td>CIV 171 Surveying I</td>
<td>3</td>
</tr>
<tr>
<td>CAD 201 Computer Aided Drafting and Design</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

#### 2nd Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

**Total Credits For Program**

**18**

**NOTES AND ADDITIONAL CURRICULUM OPTIONS**

1. Recommended technical elective courses: GIS elective, ARC 221, CAD 202. Students should consult with their faculty advisor to determine the appropriate technical electives.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
### Heating and Air Conditioning

**Career Studies Certificate (C.S.C.)**

**Purpose**
To prepare students for entry-level positions in heating, air conditioning and refrigeration repair and servicing.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in mathematics, and scores will be used for appropriate course placement. If students have deficiencies in mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

**1st Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR 121 Air Conditioning and Refrigeration I</td>
<td>3</td>
</tr>
<tr>
<td>ELE 150 A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>MTH 103 Applied Technical Mathematics I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits** 10

**2nd Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR 122 Air Conditioning and Refrigeration II</td>
<td>3</td>
</tr>
<tr>
<td>AIR 134 Circuits and Controls I</td>
<td>3</td>
</tr>
<tr>
<td>ELE 131 National Electrical Code I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits** 9

**3rd Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR 154 Heating Systems I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits** 3

**Total Credits For Program** 22

**Notes and Additional Curriculum Options**
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).

### Human Services Administration and Supervision

**Career Studies Certificate (C.S.C.)**

**Purpose**
This certificate provides students with the fundamentals necessary to make a successful transition from human services professions into a management- and/or supervisory-level position in the human services field.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English and mathematics, and scores will be used for appropriate course placement. If students have deficiencies in English and/or mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

**1st Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 111 Principles of Supervision I</td>
<td>3</td>
</tr>
<tr>
<td>MEN 102 Mental Health Skill Training II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 126 Psychology for Business and Industry</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits** 9

**2nd Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 200 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MEN 190 Coordinated Practice</td>
<td>3</td>
</tr>
<tr>
<td>MEN 196 On-Site Training</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits** 9

**Total Credits For Program** 18

**Notes and Additional Curriculum Options**
1. MEN 102 must be successfully completed before enrolling in MEN 190 and MEN 196 or MEN 290 and MEN 296.
2. Students entering the public or private sectors of human services will be subjected to criminal background and sex offender registry checks and a TB screening as a condition of their placement in a training/practicum site. Student will be expected to cover any costs incurred for these procedures. This may also be required as a condition of employment.
3. Students who are convicted felons or are on the sex offender registry in any state will not be able to secure internship sites. This will prevent them from completing requirements for the Human Services degrees and certificates.
4. All students who plan to pursue a degree or certification in Human Services are required to complete a 100 hour internship. Students will secure their own internship sites prior to the start of their MEN 190 and MEN 196 classes or their MEN 290 and MEN 296 classes. All internships must be approved by the Human Services and Mental Health Program chair.
5. Students who are 18 years of age or younger will not be able to secure an internship. Should students be unable to secure an internship, they will be unable to complete the requirements of the Human Services degree and therefore be unable to graduate.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Industrial Electricity

Career Studies Certificate (C.S.C.)

**Purpose**
Provides electrical maintenance basics.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. New students should see a counselor and returning students their advisor for more information.

<table>
<thead>
<tr>
<th>Program Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
</tr>
<tr>
<td>ELE 150 A.C. and D.C. Circuit Fundamentals</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
</tr>
<tr>
<td>ELE 118 Practical Electricity</td>
</tr>
<tr>
<td>ELE 159 Electrical Motors</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td><strong>3rd Semester</strong></td>
</tr>
<tr>
<td>ELE 156 Electrical Control Systems</td>
</tr>
<tr>
<td>ELE 239 Programmable Controllers</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td><strong>4th Semester</strong></td>
</tr>
<tr>
<td>ELE 137 National Electric Code – Industrial</td>
</tr>
<tr>
<td>ELE 240 Advanced Programmable Logic Controllers</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
</tbody>
</table>

**Total Credits For Program** 21

**Notes and Additional Curriculum Options**
1. Before taking ELE 239, the student must complete ELE 150 or equivalent or have the instructor’s permission.
2. Before taking ELE 240, the student must complete ELE 239 or have the instructor’s permission.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).

Mechanical Maintenance

Career Studies Certificate (C.S.C.)

**Purpose**
Provides mechanical maintenance basics, and prepares students for company-specific training.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in mathematics, and scores will be used for appropriate course placement. If students have deficiencies in mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

<table>
<thead>
<tr>
<th>Program Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
</tr>
<tr>
<td>ELE 150 A.C. and D.C. Circuit Fundamentals</td>
</tr>
<tr>
<td>IND 116 Applied Technology</td>
</tr>
<tr>
<td>MEC Restricted Technical Elective</td>
</tr>
<tr>
<td>MEC 154 Mechanical Maintenance I</td>
</tr>
<tr>
<td>MTH 103 Applied Technical Mathematics I</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
</tr>
<tr>
<td>DRF 160 Machine Blueprint Reading</td>
</tr>
<tr>
<td>ELE 159 Electrical Motors</td>
</tr>
<tr>
<td>MEC 254 Mechanical Maintenance II</td>
</tr>
<tr>
<td>MEC Restricted Technical Elective</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
</tbody>
</table>

**Total Credits For Program** 28

**Notes and Additional Curriculum Options**
1. Students should confer with their faculty advisor to select the appropriate MEC course elective.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Museum Studies
Career Studies Certificate (C.S.C.)

Purpose
Introduces students to the museum field. Also offers professional development for students already employed by museums and other cultural organizations engaged in the display and maintenance of collections. Program may be completed online.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

1st Semester

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 184 Survey of Museum Practice</td>
<td>3</td>
<td>HIS 183. See Note 1.</td>
</tr>
<tr>
<td>ART 185 Introduction to Museum Education</td>
<td>3</td>
<td>HIS 185 See Note 3.</td>
</tr>
<tr>
<td>Topics in Museum Studies</td>
<td>1</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Topics in Museum Studies</td>
<td>1</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8</strong></td>
<td></td>
</tr>
</tbody>
</table>

2nd Semester

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 296 Museum Studies Internship</td>
<td>3</td>
<td>HIS 296</td>
</tr>
<tr>
<td>Topics in Museum Studies</td>
<td>1</td>
<td>See Note 1.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>7</strong></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits For Program 15

Notes and Additional Curriculum Options
1. One-credit ART 195 and/or HIS 195 Topics in Museum Studies courses will be regularly offered online and will cover a range of subjects relevant to current issues in the museum field.
2. ART 184 Survey of Museum Practices is cross-listed with HIS 183 Survey of Museum Practice. Credit will not be awarded for both. Contact your advisor or the division office for more information.
3. ART 185 Introduction to Museum Education is cross-listed with HIS 185 Introduction to Museum Education. Credit will not be awarded for both. Contact your advisor or the division office for more information.
4. ART 186 Collections Management is cross-listed with HIS 186 Collections Management. Credit will not be awarded for both. Contact your advisor or the division office for more information.

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).

Network Support
Career Studies Certificate (C.S.C.)

Purpose
Prepare students for entry-level positions in computer networking.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in mathematics, and scores will be used for appropriate course placement. If students have deficiencies in mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

1st Semester

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 115 Introduction to Computer Software Applications</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>ITN 101 Introduction to Network Concepts</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITN 111 Server Administration Windows 2008</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITN 171 UNIX I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

2nd Semester

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 215 Advanced Computer Applications and Integration</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>ITE 221 PC Hardware and OS Architecture</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 290 Coordinated Internship</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ITN 260 Network Security Basics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITN 245 Network Troubleshooting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
</tbody>
</table>

Total Credits For Program 25

Notes and Additional Curriculum Options
1. Students with good computer skills may seek to satisfy this requirement by CLEP.

For additional information on this program, please contact the Division of Engineering, Business and Public Service: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
**Paralegal Studies**

Career Studies Certificate (C.S.C.)

**Purpose**
This program is designed to prepare individuals for employment in the legal field as a paralegal or legal assistant. This is a first-level program for a person who intends to pursue a certificate and/or associate degree in paralegal studies or legal assisting.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English, and scores will be used for appropriate course placement. If students have deficiencies in English, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>LGL 110 Introduction to Law and the Legal Assistant</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LGL 125 Legal Research</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LGL 126 Legal Writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective (any LGL course)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**
18

**Notes and Additional Curriculum Options**

1. Students with good computer skills may seek to satisfy this requirement by CLEP.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).

**Photography (pending approval)**

Career Studies Certificate (C.S.C.)

**Purpose**
For students interested in a career in photography. Program coursework allows students to learn techniques specific to photography. It covers the practice, theory, and history of photography, emphasizing photography as a visual language and the creative use of digital cameras in the studio and on location. Students are required to either prepare portfolios of their work or complete an internship in the field.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 180 Intro to Computer Graphics</td>
<td>3</td>
<td>Approved Art Elective</td>
</tr>
<tr>
<td>PHT 110 History of Photography</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHT 135 Electronic Darkroom</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHT 164 Introduction to Digital Photography</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 221 Studio Lighting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHT 264 Digital Photography II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Photography or Film Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Photography or Film Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 287 Portfolio and Resume Preparation</td>
<td>1</td>
<td>PHT 296 Photography Internship</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits for Program</strong></td>
<td><strong>25</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Notes and Additional Curriculum Options**

For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-594-1509 (Midlothian).
Program Development

Career Studies Certificate (C.S.C.)

**Purpose**
Prepares students for entry-level positions in computer programming.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in mathematics, and scores will be used for appropriate course placement. If students have deficiencies in mathematics, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 115 Introduction to Computer Software Applications</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>ITP 100 Software Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITP 110 Visual Basic Programming I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITP 120 Java Programming I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 215 Advanced Computer Applications and Integration</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>ITP 290 Coordinated Internship</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ITP 160 Introduction to Game Design and Development</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITP 210 Visual Basic Programming II or ITP 220 Java Programming II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITP 251 Systems Analysis and Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**

| 25 |

**Notes and Additional Curriculum Options**
1. Students with good computer skills may seek to satisfy this requirement by CLEP.

For additional information on this program, please contact the Division of Engineering, Business and Public Service: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).

Residential Electricity

Career Studies Certificate (C.S.C.)

**Purpose**
Provides an introduction to the fundamentals of residential wiring.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 110 Home Electric Power</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE 118 Practical Electricity</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>5</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 127 Residential Wiring Methods</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE 151 Electrical Troubleshooting</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>6</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 131 National Electrical Code I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE 150 A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>7</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**

| 18 |

**Notes and Additional Curriculum Options**
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Substance Abuse Assistant

Career Studies Certificate (C.S.C.)

**Purpose**
Provides a strong educational component and hands-on training to students who are interested in working in substance abuse. It fulfills some of the requirements needed for certification in Virginia as a substance abuse assistant.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English, and scores will be used for appropriate course placement. If students have deficiencies in English, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 100 Introduction to Human Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HMS 251 Substance Abuse I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEN 101 Mental Health Skill Training I</td>
<td>3</td>
<td>HMS 121</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 252 Substance Abuse II</td>
<td>3</td>
<td>ADJ 228</td>
</tr>
<tr>
<td>HMS 258 Case Management and Substance Abuse</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MEN 102 Mental Health Skill Training II</td>
<td>3</td>
<td>HMS 227, MEN 198</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEN 190 Coordinated Practice</td>
<td>3</td>
<td>MEN 290. See Notes 4 and 7.</td>
</tr>
<tr>
<td>MEN 196 On-Site Training</td>
<td>3</td>
<td>MEN 296. See Notes 4 and 7.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>6</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 24

**Notes and Additional Curriculum Options**
1. Students must obtain a grade of “C” or better in the human services sequence courses (HMS 100, MEN 101 and MEN 102) in order to remain in the program.
2. Students must complete HMS 100 and MEN 101 prior to enrolling in MEN 102.
3. MEN 101 and HMS 251 must be completed prior to enrolling in MEN 190 and MEN 196 or MEN 290 and MEN 296. Students must meet with their advisor prior to enrolling in MEN 190 and MEN 196 or MEN 290 and MEN 296.
4. MEN 190 and MEN 196 are corequisites and must be taken in the same semester. MEN 290 and MEN 296 are corequisites and must be taken in the same semester. All students who plan to pursue a degree or certification in Human Services are required to complete a 100 hour internship. Students will secure their own internship sites prior to the start of their MEN 190 and MEN 196 classes or their MEN 290 and MEN 296 classes. All internships must be approved by the Human Services and Mental Health Program chair.
5. This program is in compliance with Commonwealth of Virginia requirements for certification as a substance abuse assistant.
6. Students entering the public or private sectors of human services will be subjected to criminal background and sex offender registry checks and a TB screening as a condition of their placement in a training/practicum site. Students will be expected to cover any costs incurred for these procedures. This may also be required as a condition of employment.
7. Students who are 18 years of age or younger will not be able to secure an internship. Should students be unable to secure an internship, they will be unable to complete the requirements of the Human Services degree and therefore be unable to graduate.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
**Supervision**

Career Studies Certificate (C.S.C.)

**Purpose**
Upgrade skills needed for supervisory positions within business.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placement tests (or equivalent) in English, and scores will be used for appropriate course placement. If students have deficiencies in English, JTCC offers developmental and prerequisite courses to prepare students for the curriculum. New students should see a counselor and returning students their advisor for more information.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 111 Principles of Supervision I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>Business Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
</tbody>
</table>

Total Credits: 12

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 236 Communications in Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BUS 200 Principles of Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BUS 205 Human Resource Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Business Elective</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
</tbody>
</table>

Total Credits: 12

Total Credits For Program: 24

Notes and Additional Curriculum Options

1. Students with good computer skills may seek to satisfy this requirement by CLEP.
2. The business elective requirement can be satisfied by any 100- or 200-level course in the following areas: ACC, AST, BUS, ITE, or MKT. Students on a path to the A.A.S. degree in Business Management should select suitable business electives for that program.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).

**Surveying**

Career Studies Certificate (C.S.C.)

**Purpose**
Provides skills for initial employment or advancement in a surveying company. Instruction is provided in computer aided drafting, the use of surveying equipment and traverse calculations to include COGO and latitude/departures.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements.

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>CIV 171 Surveying I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CAD 201 Computer-Aided Drafting and Design I</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 9

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV 172 Surveying II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GIS 101 Introductions to Geospatial Technology I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Technical Elective</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
</tbody>
</table>

Total Credits: 9

Total Credits For Program: 18

Notes and Additional Curriculum Options

1. Recommended technical elective courses: GIS 102, CIV 190, CIV 196. Students should consult with their faculty advisor to determine the appropriate technical electives.

For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Web Design
Career Studies Certificate (C.S.C.)

Purpose
Provides students with skills required for a career in web design, with a focus on design fundamentals and interactive media development process.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. New students should see a counselor and returning students their advisor for more information.

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 131</td>
<td>3</td>
<td>Fundamentals of Design</td>
</tr>
<tr>
<td>ART 217</td>
<td>4</td>
<td>Electronic Graphic Design I</td>
</tr>
<tr>
<td>ART 263</td>
<td>3</td>
<td>Interactive Design</td>
</tr>
<tr>
<td>ART 141</td>
<td>4</td>
<td>Typography I</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 218</td>
<td>4</td>
<td>Electronic Graphic Design II</td>
</tr>
<tr>
<td>ART 250</td>
<td>3</td>
<td>History of Design</td>
</tr>
<tr>
<td>ART 264</td>
<td>3</td>
<td>Interactive Design II</td>
</tr>
<tr>
<td>ART/PHT Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 27

Notes and Additional Curriculum Options
For additional information on this program, please contact the Division of Arts, Humanities and Social Sciences: 804-706-5086 (Chester) or 804-1509 (Midlothian).

Welding
Career Studies Certificate (C.S.C.)

Purpose
Provide skills for employment and advancement in welding. The Welding Program is accredited by the American Welding Society (AWS) Schools Excelling through National Skills Standards Education (SENSE) program.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements.

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEL 116</td>
<td>2</td>
<td>Oxyfuel Welding</td>
</tr>
<tr>
<td>SAF 130</td>
<td>1</td>
<td>OSHA-10</td>
</tr>
<tr>
<td>WEL 123</td>
<td>3</td>
<td>Shielded Metal Arc Welding (Basic)</td>
</tr>
<tr>
<td>WEL 150</td>
<td>2</td>
<td>Welding Drawing and Interpretation</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8</strong></td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEL 250</td>
<td>3</td>
<td>Welding Quality Control and Inspection</td>
</tr>
<tr>
<td>WEL 130</td>
<td>3</td>
<td>Inert Gas Welding</td>
</tr>
<tr>
<td>WEL 160</td>
<td>3</td>
<td>Gas Metal Arc Welding</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
<tr>
<td>3rd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEL 175</td>
<td>3</td>
<td>Semi-Automatic Processes</td>
</tr>
<tr>
<td>WEL 141</td>
<td>3</td>
<td>Welder Qualification Test</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>6</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 23

Notes and Additional Curriculum Options
For additional information on this program, please contact the Division of Engineering, Business and Public Services: 804-706-5121 (Chester) or 804-594-1480 (Midlothian).
Course Descriptions
COURSE NUMBERS
Course numbers appear before the course titles. Courses numbered 1 – 9 are developmental courses. The credits earned in these courses cannot be applied toward a degree, certificate or diploma. Courses numbered 10 – 99 are first level courses for certificate programs. The credits earned cannot be applied toward an associate degree program. Courses numbered 100 – 299 can be applied to an appropriate associate degree program, and they may also be used in certificate programs.

COURSE CREDITS
Course credits are provided after the course titles. One credit is equivalent to one collegiate semester hour credit.

COURSE HOURS
The number of lecture and laboratory hours is shown at the end of each course description. The total number of lecture and laboratory hours is referred to as “contact” hours since it reflects the time spent each week under the supervision of a faculty member.

PREREQUISITES
Prerequisites are identified in the course description and must normally be met prior to enrollment. If a corequisite is identified, it means the two courses should be taken at the same time.

GENERAL USAGE COURSES
The General Usage Courses apply to multiple programs of study and all course prefixes.
General Usage Courses

90 – 190 – 290
Coordinated Practice
(1 – 5 credits)
Includes supervised practice in selected health agencies and supervised on-the-job training coordinated by the College in selected business, industrial or service firms. Credit/practice ratio maximum 1:5 hours. May be repeated for credit. Variable hours.

95 – 195 – 295
Topics
(1 – 5 credits)
Provides an opportunity to explore topical areas of interest to or needed by students. May be used also for special honors courses. May be repeated for credit. Variable hours.

96 – 196 – 296
On-Site Training
(1 – 5 credits)
Specializes in career orientation and training program (without pay) supervised and coordinated by the College in selected local businesses and industries. Credit/work ratio not to exceed 1:5 hours. May be repeated for credit. Variable hours.

97 – 197 – 297
Cooperative Education
(1 – 5 credits)
Supervised on-the-job training for pay coordinated by the Cooperative Education Office in approved business, industrial and service firms. Credit/work ratio not to exceed 1:5 hours. May be repeated for credit. Variable hours.

98 – 198 – 298
Seminar and Project
(1 – 5 credits)
Requires completion of a project or research report related to the student’s occupational objective and a study of approaches to the selection and pursuit of career opportunities in the field. May be repeated for credit. Variable hours.

99 – 199 – 299
Supervised Study
(1 – 5 credits)
Assigns problems for independent study incorporating previous instruction and supervised by the instructor. May be repeated for credit. Variable hours.

Accounting

ACC 211
Principles of Accounting I
(3 credits)
Introduces accounting principles with respect to financial reporting. Demonstrates how decision makers use accounting information for reporting purposes. Focuses on the preparation of accounting information and its use in the operation of organizations, as well as methods of analysis and interpretation of accounting information.

ACC 212
Principles of Accounting II
(3 credits)
Introduces accounting principles with respect to cost and managerial accounting. Focuses on the application of accounting information with respect to product costing, as well as its use within the organization to provide direction and to judge performance. Prerequisite: ACC 211 or equivalent. Lecture: 3 hours per week.

ACC 215
Computerized Accounting
(3 credits)
Introduces the computer in solving accounting problems. Focuses on operation of computers. Presents the accounting cycle and financial statement preparation in a computerized system and other applications for financial and managerial accounting. Prerequisite: ACC 212 or equivalent. Lecture: 3 hours per week.

ACC 221
Intermediate Accounting I
(4 credits)
Covers accounting principles and theory, including a review of the accounting cycle and accounting for current assets, current liabilities and investments. Introduces various accounting approaches and demonstrates the effect of these approaches on the financial statement users. Prerequisite: ACC 212 or equivalent. Lecture: 4 hours per week.

ACC 222
Intermediate Accounting II
(4 credits)
Continues accounting principles and theory with emphasis on accounting for fixed assets, intangibles, corporate capital structure, long-term liabilities and investments. Prerequisite: ACC 221 or equivalent. Lecture: 4 hours per week.

ACC 231
Cost Accounting I
(3 credits)
Studies cost accounting methods and reporting as applied to job order, process and standard cost accounting systems. Includes cost control and other topics. Prerequisite: ACC 212 or equivalent. Lecture: 3 hours per week.
ACC 261
Principles of Federal Taxation I
(3 credits)
Presents the study of federal taxation as it relates to individuals and related entities. Includes tax planning, compliance and reporting. Lecture: 3 hours per week.

Administration of Justice

ADJ 100
Survey of Criminal Justice
(3 credits)
Presents an overview of the United States criminal justice system; introduces the major system components—law enforcement, judiciary and corrections. Lecture: 3 hours per week.

ADJ 105
The Juvenile Justice System
(3 credits)
Presents the evolution, philosophy, structures and processes of the American juvenile delinquency system; surveys the rights of juveniles, dispositional alternatives, rehabilitation methods and current trends. Lecture: 3 hours per week.

ADJ 107
Survey of Criminology
(3 credits)
Surveys the volume and scope of crime; considers a variety of theories developed to explain the causation of crime and criminality. Lecture: 3 hours per week.

ADJ 111 – 112
Law Enforcement Organization and Administration I – II
(3 credits each)
Teaches the principles of organization and administration of law enforcement agencies. Studies the management of line operations, staff and auxiliary services, investigative and juvenile units. Introduces the concept of data processing; examines policies, procedures, rules and regulations pertaining to crime prevention. Surveys concepts of protection of life and property, detection of offenses and apprehension of offenders. ADJ 111 is a prerequisite for ADJ 112. Lecture: 3 hours per week.

ADJ 133
Ethics and the Criminal Justice Professional
(3 credits each)
Examines ethical dilemmas pertaining to the criminal justice system, including those in policing, courts and corrections. Focuses on some of the specific ethical choices that must be made by the criminal justice professional. Lecture: 3 hours per week.

ADJ 138
Defensive Tactics
(2 credits)
Surveys and demonstrates the various types of non-lethal force tools and tactics for use by criminal justice personnel in self-defense, arrest, search, restraint and transport of those in custody. Lecture: 2 hours per week.

ADJ 160
Police Response to Critical Incidents
(3 credits)
Provides a basic introduction to incident command and emerging trends. Addresses bomb threats; hostage/barricade situations; attacks on institutions such as schools and hospitals; criminal hazmat; terrorist, militia/paramilitary, and extended crime scene evidence collection scenarios; and other long term or large scale events. Lecture: 3 hours per week.

ADJ 163
Crime Analysis and Intelligence
(3 credits)
Provides a basic introduction to crime analysis and criminal intelligence. Covers the need, structure and function within the law enforcement agency, relevant law, and future trends. Lecture: 3 hours per week.

ADJ 170
Street Gangs and Law Enforcement
(3 credits)
Teaches the philosophy and history of gangs in America through the eyes of law enforcement, courts, corrections and the citizenry. Examines methods by which law enforcement defines the gang problem and intervenes in gang membership. Explores gang globalization; differentiates street gangs and terrorist cells. Lecture: 3 hours per week.

ADJ 186
Forensic Psychology
(3 credits)
Introduces student to the constructs of criminal psychology. Introduces the student to the exploration of criminal investigative analysis, VI-CAP, mental disorders and the etiology of certain criminal behaviors. Lecture: 3 hours per week.

ADJ 211 – 212
Criminal Law, Evidence and Procedures I – II
(3 credits each)
Teaches the elements of proof for major and common crimes and the legal classification of offenses. Studies the kinds, degrees and admissibility of evidence and its presentation in criminal proceedings with emphasis on legal guidelines for methods and techniques of evidence acquisition. Surveys the procedural requirements from arrest to final disposition in the various American court systems with focus on the Virginia jurisdiction. Lecture: 3 hours per week.
ADJ 227
Constitutional Law for Justice Personnel
(3 credits)
Surveys the basic guarantees of liberty described in the U.S. Constitution and the historical development of these restrictions on government power, primarily through U.S. Supreme Court decisions. Reviews rights of free speech, press, assembly, as well as criminal procedure guarantees (to counsel, jury trial, habeas corpus, etc.) as they apply to the activities of those in the criminal justice system. Lecture: 3 hours per week.

ADJ 228
Narcotics and Dangerous Drugs
(3 credits)
Surveys the historical and current usage of narcotics and dangerous drugs. Teaches the identification and classification of such drugs and emphasizes the symptoms and effects on their users. Examines investigative methods and procedures utilized in law enforcement efforts against illicit drug usage. Lecture: 3 hours per week.

ADJ 229
Law Enforcement and the Community
(3 credits)
Considers current efforts by law enforcement personnel to achieve an effective working relationship with the community. Surveys and analyzes various interactive approaches of law enforcement agencies and the citizenry they serve. Lecture: 3 hours per week.

ADJ 230
Civil Liabilities in Criminal Justice
(3 credits)
Covers the basic legal concepts, theories and court cases relative to the increasing civil litigation against law enforcement personnel and the representative supportive government agencies that fund them. Lecture: 3 hours.

ADJ 234
Terrorism and Counter Terrorism
(3 credits)
Surveys the historical and current practices of terrorism that are national, transnational, or domestic in origin. Includes biological, chemical, nuclear, and cyber-terrorism. Teaches the identification and classification of terrorist organizations, violent political groups and issue-oriented militant movements. Examines investigative methods and procedures utilized in counter terrorist efforts domestically and internationally. Lecture: 3 hours per week.

ADJ 236
Principles of Criminal Investigation
(3 credits)
Surveys the fundamentals of criminal investigation procedures and techniques. Examines crime scene search, collecting, handling and preserving of evidence. Lecture: 3 hours per week.

ADJ 244
Terrorism Response Planning
(3 credits)
Builds an understanding of terrorism, and the past, present, and future national and international responses to terrorism and the defense against it. Teaches the knowledge and skills necessary to assist State and local emergency managers in planning for and managing a response to a terrorist incident. Lecture: 3 hours per week.

ADJ 245
Management of Correctional Facilities
(3 credits)
Describes management options and operational implications for staffing, security, safety, and treatment. Considers impact of changes in public policy on corrections. Lecture: 3 hours per week.

ADJ 247
Criminal Behavior
(3 credits)
Introduces and evaluates the concepts of normal and abnormal behavior. Focuses on the psychological and sociological aspects of criminal and other deviant behavior patterns. Lecture: 3 hours per week.

Administrative Support Technology

AST 205
Business Communications
(3 credits)
Teaches techniques of oral and written communications. Emphasizes writing and presenting business-related materials. Prerequisite: ENG 111. Lecture: 3 hours per week.

Air Conditioning

AIR 121 – 122
Air Conditioning and Refrigeration I – II
(3 credits each)
Studies refrigeration theory; characteristics of refrigerants, temperature and pressure; tools and equipment; soldering; brazing; refrigeration systems; system components; compressors; evaporators; and metering devices. Presents charging and evaluation of systems and leak detection. Explores servicing the basic system. Explains use and care of oils and additives and troubleshooting of small commercial systems. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week. AIR 122 prerequisite: AIR 121 or by permission of the instructor.
AIR 134
Circuits and Controls I
(3 credits)
Presents circuit diagrams for air conditioning units, reading and drawing of circuit diagrams, types of electrical controls. Includes analysis of air conditioning circuits, components, analysis and characteristics of circuits and controls, testing and servicing. Introduces electricity for air conditioning which includes circuit elements, direct current circuits and motors, single and three-phase circuits and motors, power distribution systems, and protective devices. Studies the electron and its behavior in passive and active circuits and components. Demonstrates electronic components and circuits as applied to air conditioning system. Part I of II. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

AIR 154
Heating Systems I
(3 Credits)
Introduces types of fuels and their characteristics of combustion; types, components and characteristics of burners, and burner efficiency analyzers. Studies forced air heating systems including troubleshooting, preventive maintenance and servicing. Part I of II. Lecture: 2 hours and Laboratory: 2 hours. Total: 4 hours per week.

Arabic

ARA 101 – 102
Beginning Arabic I – II
(4 credits each)
Introduces understanding, speaking, reading, and writing skills and emphasizes basic Arabic sentence structure. Discusses the diversity of cultures in the Arab world. Lecture: 4 hours per week.

ARA 201
Intermediate Arabic I
(3 Credits)
Continues to develop understanding, speaking, reading and writing skills and emphasizes basic Arabic sentence structure. Discusses the diversity of cultures in the Arab world. Classes are conducted in Arabic. Prerequisite: ARA 102. Part I of II. Lecture: 3 hours per week.

ARA 202
Intermediate Arabic II
(3 Credits)
Continues to develop understanding, speaking, reading and writing skills and emphasizes basic Arabic sentence structure. Discusses the diversity of cultures in the Arab world. Classes are conducted in Arabic. Prerequisite: ARA 201. Part II of II. Lecture: 3 hours per week.

Architecture

ARC 121 – 122
Architectural Drafting I – II
(3 credits each)
Introduces techniques of architectural drafting, including lettering, dimensioning and symbols. Requires production of plans, sections and elevations of a simple building. Studies use of common reference material and the organization of architectural working drawings. Requires development of a limited set of working drawings, including a site plan, related details and pictorial drawings. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week. ARC 121 corequisite: ARC 221 or the equivalent. ARC 122 prerequisite: ARC 121 or by permission of the instructor.

ARC 211
Computer Aided Drafting Applications
(3 credits)
Utilizes computer’s hardware and software to create orthographic and pictorial drawings. Requires creation of working drawings by adding the necessary sections, dimensions, and notes to the computer generated views. Prerequisite ARC 210 or equivalent. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

ARC 221
Architectural CAD Applications Software I
(3 credits)
Teaches the principles and techniques of architectural drawing practices through the use of architecture specific CAD software. Utilizes the commands and features of the software to generate drawings that emphasize architectural design and structural systems. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

ARC 222
Architectural CAD Applications Software II
(3 credits)
Uses advanced features of architectural CAD software to teach students to develop working drawings and details that adhere to the practices and techniques of architectural drafting principles. Use local prerequisites. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

ARC 231
Advanced Architectural Drafting I
(4 credits)
Provides fundamental knowledge of the principles and techniques of architectural drawing procedures. Familiarizes student with design process. Provides a better understanding of the relation between architectural design and structural systems. Prerequisite: ARC 122 or approval of the instructor. Lecture: 2 hours. Laboratory: 6 hours. Total: 8 hours per week.
ARC 232
Advanced Architectural Drafting II
(4 credits)
Requires development of complete set of working drawings and
details according to principles and techniques of architectural
drawings and procedures used in professional firms. Prerequisite:
ARC 231 or approval of the instructor. Lecture: 2 hours.
Laboratory: 6 hours. Total: 8 hours per week.

ARC 243
Environmental Systems
(4 credits)
Studies energy sources and strategies for use in buildings; heat
loss and heat gain; heating and cooling equipment and system;
water supply, distribution and waste systems and equipment;
principles of electricity, electrical systems and equipment.
Lecture: 4 hours per week.

ARC 246
Materials and Methods of Construction
(4 credits)
Introduces the characteristics of building materials and the
methods of construction in which these materials are used in the
erection of structures. Introduces the physical properties of steel,
concrete, timber, glass and related materials as well as methods
used in testing materials. All sixteen CSI divisions are discussed.
Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

ARC 258
Building Codes, Contract Documents and
Professional Office Practices
(3 credits)
Covers professional role of the architectural technician with
regard to the construction industry. Includes building codes and
their effect on specifications and drawings. Teaches purpose
and writing of specifications with their legal and practical
applications to working drawings. Analyzes contract documents
for client-architect-contractor responsibilities and duties.
Lecture: 3 hours per week.

Art

ART 101 – 102
History and Appreciation of Art I – II
(3 credits each)
Examines the history and interpretation of architecture, sculpture
and painting. Begins with prehistoric art and follows the
development of western civilization to the present. Lecture: 3
hours per week.

ART 103
History of Far Eastern Art I
(3 credits)
Surveys the history of Far Eastern art from the prehistoric
period to the present. Part I focuses on the art of India and
Southeast Asia. Part II focuses on the art of China, Japan, and
Korea. Emphasizes architecture, painting and sculpture with
some instruction in printmaking and decorative arts. Part I of II.
Lecture: 3 hours per week.

ART 104
History of Far Eastern Art II
(3 credits)
Surveys the history of Far Eastern art from the prehistoric
period to the present. Part I focuses on the art of India and Southeast
Asia. Part II focuses on the art of China, Japan, and Korea.
Emphasizes architecture, painting and sculpture with some
instruction in printmaking and decorative arts. Part II of II.
Lecture: 3 hours per week.

ART 106
History of Modern Art
(3 credits)
Surveys the history of modern architecture, sculpture, painting,
and graphic arts in representational and non-representational
forms. Focuses on the periods and movements that influenced
the arts of the twentieth century. Emphasizes contemporary
art forms, particularly the interaction between art and society,
industry, and design. Lecture: 3 hours per week.

ART 109
History of Women Artists
(3 credits)
Surveys the work of women artists through history, with
emphasis on the role of women artists. Lecture: 3 hours
per week.

ART 111
Introduction to the Arts I
(3 credits each)
Parallels studio classes and provides a general survey of the arts.
Emphasizes perception, using major monuments of painting,
sculpture and architecture as examples. Lecture: 3 hours
per week.

ART 121 – 122
Drawing I – II
(3 credits each)
Develops basic drawing skills and understanding of visual
language through studio instruction/lecture. Introduces
concepts such as proportion, space, perspective, tone and
composition as applied to still life, landscape and the figure.
Uses drawing media such as pencil, charcoal, ink wash and
color media. Includes field trips and gallery assignments as
appropriate. Lecture: 1 hour. Studio instruction: 4 hours. Total: 5
hours per week.
ART 125
Introduction to Painting
(3 credits)
Introduces study of color, composition and painting techniques. Places emphasis on experimentation and enjoyment of oil and/or acrylic paints and the fundamentals of tools and materials. Lecture: 2 hours. Studio instruction: 3 hours. Total: 5 hours per week.

ART 131 – 132
Fundamentals of Design I – II
(3 credits each)
Explores the concepts of two- and three-dimensional design and color. May include field trips as required. Lecture: 1 hour. Studio instruction: 4 hours. Total: 5 hours per week.

ART 133
Visual Arts Foundation
(4 credits)
Covers tools and techniques, design concepts and principles, color theory and an introduction to the computer for graphic use. Applies to all fields of Visual Art. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

ART 138
Figure Drawing
(3 credits)
 Develops drawing skills for the beginning and experienced students. Explores a broad range of drawing problems dealing with the human figure in costume using various media and techniques. Prerequisite: ART 120 or divisional approval. Lecture: 2 hours. Studio instruction: 2 hours. Total: 4 hours per week.

ART 141
Typography I
(4 credits)
Studies the history of letterforms and typefaces and examines their uses in contemporary communications media. Emphasizes applications to specific design problems. Includes identification and specification of type and uses current technologies for copy fitting and hands-on typesetting problems. Prerequisite: ART 140. Part I of II. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

ART 145
Introduction to Fashion Design
(3 credits)
Introduces the essential elements of fashion design. Includes the study of garment silhouette and terminology, basic drawing skills of the fashion figure and garments, creating flats, using croquis, rendering fabrics, designing a fashion line, and understanding the apparel manufacturing and freelance design industries. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

ART 148
Garment Construction
(3 credits)
Gives students a foundational understanding of garment construction and fabric manipulation in order to create apparel. Includes the fundamentals of hand and machine sewing techniques and basic pattern symbols. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

ART 150
History of Film and Animation
(3 credits)
Exposes the student to the rich history of temporal imagery from the invention of the zoetrope and kinetoscope through the rise of the moving picture industry and the development of the first animated films to present day television. Chronicles the impact of the moving image in the 20th century. Discusses the design and concept of influential works as well as the relationship between these earlier forms of moving graphics and today’s innovative video technology. Lecture: 3 hours per week.

ART 153 – 154
Ceramics I – II
(3 credits each)
Presents problems in the design and production of functional and non-functional ceramic works. Includes hand-building the potter’s wheel and clays and glazes. Lecture: 2 hours. Studio instruction: 3 hours. Total: 5 hours per week.

ART 180
Introduction to Computer Graphics
(3 credits)
Provides a working introduction to computer-based electronic technology used by visual artists and designers. Presents the basics of operating platforms and standard industry software. Introduces problems in which students can explore creative potential of the new electronic media environment. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

ART 184
Survey of Museum Practice
(3 credits)
Explores the role of the museum in society and traces the foundations upon which these public, cultural and educational institutions are built. Emphasizes the management and interpretation of historic properties and collections. This course is cross-listed with HIS 183. Credit will not be awarded for both. Lecture: 3 hours per week.

ART 185
Introduction to Museum Education
(3 credits)
Explores the basic elements of museum education, the different programming techniques museums use to reach all types of audiences, and the ways museums identify audiences. This course is cross-listed with HIS 185. Credit will not be awarded for both. Lecture: 3 hours per week.
ART 186  
Collections Management  
(3 credits)  
Discusses the fundamentals of collections policy, deaccessioning, appraisal, and curatorial management. This course is cross-listed with HIS 186. Credit will not be awarded for both. Lecture: 3 hours per week.

ART 195  
Drawing for Beginners Workshop  
(1 credit)  
Introduces observing and rendering from life and the use of basic drawing materials. Good preparation for ART 121 Drawing I. No prerequisite. Lecture: 1 hour per week.

ART 203  
Animation I  
(4 credits)  
Introduces the student to the basic techniques of animation, combining traditional and computer-generated skills. Teaches theoretical elements of the aesthetics of sequential imagery. Provides practical experience in two-dimensional and/or three-dimensional animation. Exposes the student to a variety of animation techniques. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

ART 204  
Animation II  
(4 credits)  
Builds on the student’s skills in the techniques of animation developed in ART 203 Animation I. Emphasizes computer-generated, high-quality animations. Teaches the advanced techniques of two- and three-dimensional computer animation. Prerequisite(s): ART 203. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

ART 213  
Italian Art I  
(3 credits)  
Surveys Italian art from Cimabue to Canaletto. Includes sculpture, painting, and architecture. Part I of II. Lecture: 3 hours.

ART 217  
Graphic Design I  
(4 credits)  
Focuses on creative concepts and skills necessary for graphic design problem solving using current technology. Includes techniques specific to computer applications for the production of print design using text and image. Part I of II. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

ART 218  
Graphic Design II  
(4 credits)  
Builds on the studies completed in Graphic Design I. Teaches advanced problem solving skills, concept development and project management. Applies intermediate level production techniques to 2D and 3D graphic design using current technologies and principles of pre-press production. Part II of II. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

ART 231 – 232  
Sculpture I – II  
(3 credits each)  
Introduces sculptural concepts and methods of production in traditional and contemporary media. Includes clay, plaster, wood, stone, metal, plastics and terra cotta. May include field trips. Prerequisite: ART 131. Lecture: 3 hours. Studio instruction: 2 hours. Total: 5 hours per week.

ART 241 – 242  
Painting I – II  
(3 credits each)  
Introduces abstract and representational painting in acrylic and/or oil with emphasis on color composition and value. Prerequisites ART 122 or divisional approval. Lecture: 1 hours. Studio instruction: 4 hours. Total: 5 hours per week.

ART 243 – 244  
Watercolor I – II  
(3 credits each)  
Presents abstract and representational painting in watercolor with emphasis on design, color, composition, technique and value. Prerequisite: ART 131 or divisional approval. Lecture: 2 hours. Studio instruction: 3 hours. Total: 5 hours per week.

ART 245  
Portrait Painting  
(3 credits)  
Explores portrait painting as representational and abstract art. Emphasizes analytical study of the head using a variety of mediums. Prerequisites: ART 141 and ART 121. Lecture: 2 hours. Studio instruction: 3 hours. Total: 5 hours per week.

ART 246  
Figure Painting  
(3 credits)  
Concentrates on the human figure as subject matter for painting. Emphasizes composition as it relates to figure study. Explores formal and informal approaches to include representation and abstraction using various painting media. Prerequisites: ART 141 and ART 121. Lecture: 2 hours. Studio instruction: 3 hours. Total: 5 hours per week.
ART 247
Painting Techniques for Illustrators
(3 credits)
Introduces materials and techniques used by the illustrator. Includes water-soluble paints (watercolor, acrylic, gouache), oil-based paints, and mixed media.
Lecture: 1 hour. Studio instruction: 4 hours. Total: 5 hours per week.

ART 248 – 249
Painting III – IV
(3 credits)
Introduces advanced concepts and techniques of representational and abstract painting as applied to the head/figure, still-life, landscape and other subject matter including non-objective painting. Gives additional instruction in color, composition, modeling, space and perspective. Encourages individual approaches to painting. Prerequisite: ART 242 to ART 248.
Lecture: 3 hours. Laboratory: 2 hours. Total: 5 hours per week.

ART 250
History of Design
(3 credits)
Surveys the development of graphic design and illustration with emphasis on the 19th and 20th centuries. Analyzes the work of outstanding designers and illustrators. Lecture: 3 hours per week.

ART 259
Landscape Painting
(3 credits)
Provides a comprehensive study of the techniques and approaches to the subject of landscape painting from the historic and current prospective. Prerequisite: ART 122.
Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

ART 263
Interactive Design I
(3 credits)
Focuses on conceptualization and problem solving for interactive design. Instructs students in techniques specific to web, multimedia for the web and other interactive design projects using current technology and standards. Interactive functionality and usability are covered. Part I of II. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

ART 264
Interactive Design II
(3 credits)
Builds on the studies completed in Interactive Design I. Focuses on conceptualization and problem solving for interactive design. Instructs students in intermediate techniques specific to web, multimedia for the web and other interactive design projects using current technology and standards. Includes interactive documents and experiences. Part II of II. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

ART 271
Printmaking I
(3 credits)
Introduces the student to the full range of printmaking techniques. Includes woodcut, silkscreen, etching, and lithography. Provides historical perspective on printmaking. Part I of II. Lecture: 2 hours. Studio instruction: 3 hours. Total: 5 hours per week.

ART 287
Portfolio and Resume Preparation
(1 credit)
Focuses on portfolio preparation, resume writing and job interviewing for students. Recommended for final semester program students. Requires instructor’s approval.
Lecture: 1 hour per week.

ART 291 – 292
Computerized Graphic Design I – II
(4 credits each)
Introduces students to using the computer as a publishing system. Examines stages of a publication from typesetting, laying out, creating and digitizing of illustrations and photographs, to the final printing. Requires students to write, design, illustrate and print pamphlets on the computer, including one full-color publication. Lecture: 2 hours. Studio instruction: 4 hours. Total: 6 hours per week.

ART 295
Topics in Watercolor
(3 credits)
Presents independent study abstract and representational painting in watercolor with emphasis on design, color, composition, technique and value. Prerequisite ART 243 and ART 244 or divisional approval. Lecture: 2 hours. Studio instruction: 3 hours. Total: 5 hours per week.

ART 296
Museum Internship
(3 credits)
Internship without pay with an approved museum, collection, or historic site, supervised and coordinated by the college. Credit/work ratio not to exceed 1:5 hours. May be repeated for credit. Variable hours.

ART 298
Seminar and Project
(1 – 5 credits)
Requires completion of a project or research report related to the student's occupational objectives and a study of approaches to the selection and pursuit of career opportunities in the field. May be repeated for credit. Variable hours.
Basic Skills

BSK 1
Whole Numbers
(1 credits)
Covers whole number principles and computations. Credits not applicable toward graduation. Lecture: 1 hour. Total: 1 hour per week.

Biology

BIO 101
General Biology I
(4 credits)
Focuses on foundations in cellular structure, metabolism, and genetics in an evolutionary context. Explores the core concepts of evolution; structure and function; information flow, storage and exchange; pathways and transformations of energy and matter; and systems biology. Emphasizes process of science, interdisciplinary approach, and relevance of biology to society. Part I of a two-course sequence. Prerequisite: Readiness to enroll in ENG 111 plus completion of developmental math unit 1-3 or equivalent required or placement in unit 4 or above. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 hours per week.

BIO 102
General Biology II
(4 credits)
Focuses on diversity of life, anatomy and physiology of organisms, and ecosystem organization and processes in an evolutionary context. Explores the core concepts of evolution; structure and function; information flow, storage and exchange; pathways and transformations of energy and matter; and systems biology. Emphasizes process of science, interdisciplinary approach, and relevance of biology to society. Part II of a two-course sequence. Prerequisite: BIO 101. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 hours per week.

BIO 110
General Botany
(4 credits)
Emphasizes plant life cycles, anatomy, morphology, taxonomy and evolution. Considers the principles of genetics, ecology and physiology. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 hours per week.

BIO 120
General Zoology
(4 credits)
Presents basic biological principles and emphasizes structure, physiology and evolutionary relationships of invertebrates and vertebrates. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 hours per week.

BIO 141 – 142
Human Anatomy and Physiology I – II
(4 credits each)
Integrates anatomy and physiology of cells, tissues, organs and systems of the human body. Integrates concepts of chemistry, physics and pathology. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

BIO 150
Introductory Microbiology
(4 credits)
Studies the general characteristics of microorganisms. Emphasizes their relationships to individual and community health. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 hours per week.

BIO 170
Biotechnology Methods
(1-2 credits)
Provides students with laboratory skills needed for employment in the biotechnology industry. Focuses on widely used biotechnology procedures in areas of DNA analysis, protein analysis, tissue culture, monoclonal antibodies quality control assays and diagnostic procedures. Laboratory: 3 hours per week.

BIO 206
Cell Biology
(4 credits)
Introduces the ultrastructure and functions of cells. Emphasizes cell metabolism, cell division, and control of gene expression. Prerequisite: BIO 101 and CHM 111. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 hours per week.

BIO 253
Biotechnology Concepts
(3 credits)
Explores the growing field of biotechnology ranging from basic cellular and molecular biology concepts to both basic and advanced laboratory techniques. Emphasizes the application of biotechnology to medicine, agriculture, environmental science, and forensics. Includes discussion of the business, regulatory/legal, ethical, and societal issues of this topic as well as the growing field of bioinformatics. Lecture: 3 hours. Total: 3 hours per week.

BIO 256
General Genetics
(4 credits)
Explores the principles of genetics ranging from classical Mendelian inheritance to the most recent advances in the biochemical nature and function of the gene. Includes experimental design and statistical analysis. Prerequisite: BIO 101-102 or equivalent. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 hours per week.
Business Management and Administration

BUS 100  
Introduction to Business  
(3 credits)  
Presents a broad introduction to the functioning of business enterprise within the U.S. economic framework. Introduces economic systems, essential elements of business organization, production, human resource management, marketing, finance and risk management. Develops business vocabulary. Lecture: 3 hours per week.

BUS 111  
Principles of Supervision I  
(3 credits)  
Teaches the fundamentals of supervision, including the primary responsibilities of the supervisor. Introduces factors relating to the work of supervisor and subordinates. Covers aspects of leadership, job management, work improvement, training and orientation, performance evaluation and effective employee/supervisor relationships. Lecture: 3 hours per week.

BUS 116  
Entrepreneurship  
(3 credits)  
Presents the various steps considered necessary when going into business. Includes areas such as product-service analysis, market research evaluation, setting up books, ways to finance startup, operations of the business, development of business plans, buyouts versus starting from scratch, and franchising. Uses problems and cases to demonstrate implementation of these techniques. Lecture: 3 hours per week.

BUS 125  
Applied Business Mathematics  
(3 credits)  
Applies mathematical operations to business process and problems such as wages and payroll, sales and property taxes, paycheck records and bank reconciliation, depreciation, overhead, distribution of profit and loss in partnerships, distribution of corporate dividends, commercial discounts, markup, markdown, simple interest, present values, bank discount notes, multiple payment plans, compound interest annuities, sinking funds and amortization. Lecture: 3 hours per week.

BUS 165  
Small Business Management  
(3 credits)  
Identifies management concerns unique to small businesses. Introduces the requirements necessary to initiate a small business and identifies the elements comprising a business plan. Presents information establishing financial and administrative controls, developing a marketing strategy, managing business operations and the legal and government relationships specific to small businesses. Lecture: 3 hours per week.

BUS 200  
Principles of Management  
(3 credits)  
Teaches management and the management functions of planning, organizing, leading and controlling. Focuses on application of management principles to realistic situations managers encounter as they attempt to achieve organizational objectives. Lecture: 3 hours per week.

BUS 201  
Organizational Behavior  
(3 credits)  
Presents a behaviorally oriented course combining the functions of management with the psychology of leading and managing people. Focuses on the effective use of human resources through understanding human motivation and behavior patterns, conflict management and resolution, group functioning and process, the psychology of decision-making and the importance of recognizing and managing change. Lecture: 3 hours per week.

BUS 205  
Human Resource Management  
(3 credits)  
Introduces employment, selection and placement of personnel, forecasting, job analysis, job descriptions, training methods and programs, employee evaluation systems, compensation, benefits and labor relations. Lecture: 3 hours per week.

BUS 208  
Quality and Productivity Management  
(3 credits)  
Focuses on the key quality improvement concepts regarding products and services, customers and suppliers, and systems and processes that make quality a part of the work life of an organization. Emphasizes the role of teams and a variety of quality improvement tools, charts, matrices, and diagrams. Lecture: 3 hours per week.

BUS 220  
Introduction to Business Statistics  
(3 credits)  
Introduces statistics as a tool in decision making. Emphasizes ability to collect, present and analyze data. Employs measures of central tendency and dispersion, statistical inference, index number and time series analysis. Prerequisite: MTH 120. Lecture: 3 hours per week.

BUS 234  
Supply Chain Management  
(3 credits)  
Examines the process of planning, organizing, and controlling the flow of materials and services from supplier to end users/customers. Focuses on coordinating supply management, operations and integrated logistics into a seamless pipeline to maintain a continual flow of products and services. Lecture: 3 hours per week.
BUS 241
**Business Law I**
(3 credits)
Develops a basic understanding of the US business legal environment. Introduces property and contract law, agency and partnership liability and government regulatory law. Students will be able to apply these legal principles to landlord/tenant disputes, consumer rights issues, employment relationships and other business transactions. Lecture: 3 hours per week.

BUS 266
**Production and Operations Management**
(3 credits)
Examines the process by which both goods and services-producing businesses, many not-for-profit institutions and governmental agencies transform resources into an end product to meet the demands of customers or clients. Includes a survey of some of the quantitative methods involved in the process. Prerequisite: MTH 120. Lecture: 3 hours per week.

BUS 280
**Introduction to International Business**
(3 credits)
Studies the problems, challenges, and opportunities which arise when business operations or organizations transcend national boundaries. Examines the functions of international business in the economy, international and transnational marketing, production, and financial operations. Lecture: 3 hours per week.

Chemistry

CHM 101 – 102
**General Chemistry I – II**
(4 credits each)
Emphasizes experimental and theoretical aspects of inorganic, organic and biological chemistry. Discusses general chemistry concepts as they apply to issues within society and the environment. Designed for the non-science major. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

CHM 110
**Survey of Chemistry**
(3 credits each)
Introduces the basic concepts of general, organic and biochemistry with emphasis on their applications to other disciplines. No previous chemistry background required. Lecture: 3 hours per week.

CHM 111 – 112
**College Chemistry I – II**
(4 credits each)
Explores the fundamental laws, theories and mathematical concepts of chemistry. Designed primarily for science and engineering majors. Requires a strong background in mathematics. Prerequisite for CHM 111: Must have completed or tested out of Developmental Math Modules 1-9 or equivalent. Students must attend both lecture and lab. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

CHM 241
**Organic Chemistry I**
(3 credits each)
Introduces fundamental chemistry of carbon compounds, including structures, physical properties, syntheses, and typical reactions. Emphasizes reaction mechanisms. Prerequisite: CHM 112. Part I of II. Lecture: 3 hours per week.

CHM 245
**Organic Chemistry Laboratory I**
(2 credits each)
Includes qualitative organic analysis. Part I of II. Prerequisite or corequisite: CHM 241. Lecture: 1 hour per week. Laboratory: 3 hours per week. Total: 4 hours per week.

Childhood Development

CHD 118
**Methods and Materials in the Language Arts for Children**
(3 credits)
Presents techniques and methods for encouraging the development of language and perceptual skills in young children. Stresses improvement of vocabulary, speech and methods to stimulate discussion. Surveys children’s literature, examines elements of quality storytelling and story reading and stresses the use of audiovisual materials. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CHD 119
**Introduction to Reading Methods**
(3 credits)
Focuses on promoting language and literacy skills as the foundation for emergent reading. Emphasizes phonetic awareness and alphabetic principles, print awareness and concepts, comprehension and early reading and writing. Addresses strategies for intervention and support for exceptional children and English Language Learners. Prerequisite: ENG 111. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.
CHD 120
Introduction to Early Childhood Education
(3 credits)
Introduces early childhood development through activities and experiences in nursery, pre-kindergarten, kindergarten and primary programs. Investigates classroom organization and procedures and use of classroom time and materials, approaches to education for young children, professionalism and curricular procedures. Lecture: 3 hours per week.

CHD 145
Methods and Materials for Teaching Art, Music and Movement to Children
(3 credits)
Provides experiences in developing the content, methods and materials for directing children in art, music and movement activities. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CHD 146
Methods and Materials for Teaching Math, Science and Social Studies to Children
(3 credits)
Provides experiences in developing the content, methods and materials for directing children in math, science and social studies activities. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CHD 165
Observation and Participation in Early Childhood/Primary Settings
(3 credits)
Observes and participates in early childhood settings such as child care centers, preschools, Montessori schools or public school settings (kindergarten through third grade). Students spend one hour each week in seminar session in addition to 60 clock hours in the field. May be taken again for credit. Lecture: 1 hour. Laboratory: 4 hours. Total: 5 hours per week.

CHD 166
Infant and Toddler Programs
(3 credits)
Examines the fundamentals of infant and toddler development, including planning and implementing programs in group care. Emphasizes meeting physical, social, emotional and cognitive needs: scheduling, preparing age-appropriate activities, health and safety policies, record keeping and reporting to parents. Lecture: 3 hours per week.

CHD 167
CDA Theories and Applications: Portfolio
(3 credits)
Supports the student/CDA candidate in completing the Professional Resource File and all documentation required for the national CDA credential. This course is designed for students pursuing the CDA (Child Development Associate) credential. Lecture: 3 hours per week.

CHD 205
Guiding the Behavior of Children
(3 credits)
Explores positive ways to build self-esteem in children and help them develop self-control. Presents practical ideas for encouraging pro-social behavior in children and emphasizes basic skills and techniques in classroom management. Lecture: 3 hours per week.

CHD 210
Introduction to Exceptional Children
(3 credits)
Reviews the history of education for exceptional children. Studies the characteristics associated with exceptional children. Explores positive techniques for managing behavior and adapting materials for classroom use. Lecture: 3 hours per week.

CHD 215
Models of Early Childhood Education Programs
(3 credits)
Studies and discusses the various models and theories of early childhood education programs including current trends and issues. Presents state licensing and staff requirements. Lecture: 3 hours per week.

CHD 216
Early Childhood Programs, School, and Social Change
(3 credits)
Explores methods of developing positive, effective relations between staff and parents to enhance the developmental goals of home and school. Reviews current trends and issues in education, describes symptoms of homes in need of support, investigates non-traditional family and cultural patterns, and lists community resources. Lecture: 3 hours per week.

CHD 265
Advanced Observation and Participation in Early Childhood/Primary Settings
(3 credits)
Observes and participates in early childhood settings such as child care centers, preschool, Montessori schools or public school settings (Kindergarten through third grade). Emphasizes planning and implementation of appropriate activities and materials for children. Students will spend one hour each week in a seminar session in addition to 60 clock hours in the field. May be taken again for credit. Prerequisite: CHD 165. Lecture: 1 hour per week. Laboratory: 4 hours. Total: 5 hours per week.

CHD 270
Administration of Early Childhood Programs
(3 credits)
Examines the skills needed for establishing and managing early childhood programs. Emphasizes professionalism and interpersonal skills, program planning, staff selection and development, creating policies, budgeting and developing forms for recordkeeping. Lecture: 3 hours per week.
CHD 298
Seminar Portfolio Development
(1 credit)
Requires completion of a project or research report related to the student’s occupational objectives and a study of approaches to the selection and pursuit of career opportunities in the field.

Chinese

CHI 101
Beginning Chinese I
(5 credits)
Introduces understanding, speaking, reading, and writing skills; emphasizes basic Chinese sentence structure. Lecture: 5 hours per week.

CHI 102
Beginning Chinese II
(5 credits)
Introduces understanding, speaking, reading, and writing skills; emphasizes basic Chinese sentence structure. Lecture: 5 hours per week. Prerequisite: CHI 101.

CHI 201
Intermediate Chinese I
(4 credits)
Offers intensive practice in comprehending and speaking Chinese, with emphasis on developing structure and fluency. Prerequisite: CHI 102. Part I of II. Lecture: 4 hours per week.

CHI 202
Intermediate Chinese II
(4 credits)
Offers intensive practice in comprehending and speaking Chinese, with emphasis on developing structure and fluency. Prerequisite: CHI 201. Part II of II. Lecture: 4 hours per week.

Civil Engineering

CIV 171
Surveying I
(3 credits)
Introduces surveying equipment, procedures and computations including adjustment of instruments, distance measurement, leveling, angle measurement, traversing, traverse adjustments, area computations and introduction to topography. Prerequisite: Engineering Technical Mathematics or divisional approval. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

CIV 172
Surveying II
(3 credits)
Introduces surveys for transportation systems including the preparation and analysis of topographic maps, horizontal and vertical curves, earthwork and other topics related to transportation construction. Prerequisite: CIV 171 or by permission of instructor. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

Communication Studies and Theatre

CST 100
Principles of Public Speaking
(3 credits)
Applies theory and principles of public address with emphasis on preparation and delivery. Lecture: 3 hours per week.

CST 110
Introduction to Communication
(3 credits)
Examines the elements affecting speech communication at the individual, small group, and public communication levels with emphasis on practice of communication at each level. Lecture: 3 hours per week.

CST 111
Voice and Diction I
(3 credits)
Enables students to improve pronunciation, articulation, and voice quality. Includes applied phonetics. Lecture: 3 hours per week.

CST 114
Survey of Mass Media
(3 credits)
Examines the history and current understanding of mass communication. Covers print media (newspapers, magazines, and books), electronic media (radio, television, film, the Internet), advertising, public relations, and mass media theory, research, and ethics. Lecture: 3 hours per week.

CST 115
Small Group Communication
(3 credits)
Emphasizes the development of presentational ability in a group, decision-making, group maintenance, and leadership and participant skills. Incorporates a preliminary study of group dynamics. Lecture: 3 hours per week.

CST 130
Introduction to the Theatre
(3 credits)
Surveys the principles of drama, the development of theatre production and selected plays to acquaint the student with various types of theatrical presentations. Lecture: 3 hours per week.
CST 131 – 132
Acting I – II
(3 credits each)
Develops personal resources and explores performance skills through such activities as stage games, role playing, improvisation, work on basic script units and performance of scenes. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

CST 136
Theatre Workshop
(1 – 6 credits)
Enables students to work in various activities of a play production or a musical production including performance, orchestra, set design, stage carpentry, sound, costuming, lighting, stage managing, props, promotion, or stage crew. May be repeated for credit. Variable hours per week. This course is cross-listed with MUS 129. Credit will not be awarded for both.

CST 137
Oral Interpretation
(3 credits)
Studies the theory and practice of performing various types of literature: prose, poetry, and drama. Emphasizes the relationship among the oral interpreter, the literary work, and the audience. Lecture: 3 hours per week.

CST 140
Acting for the Camera
(3 credits)
Explores the practical and artistic elements involved in acting for the camera through such activities as: performance of commercial, film and television scripts, developing knowledge of the technical side of camera work and the study of the business of acting. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CST 151
Film Appreciation I
(3 credits)
Provides students with a critical understanding of film through the discussion and viewing of motion pictures with emphasis upon the study of film history and the forms and functions of film. Students will develop skills to analyze the shared social, cultural and historical influences of films and their contexts. Part I of II. Lecture: 3 hours per week.

CST 152
Film Appreciation II
(3 credits)
Provides students with a critical understanding of film through the discussion and viewing of motion pictures with emphasis upon the study of film history and the forms and functions of film. Students will develop skills to analyze the shared social, cultural and historical influences of films and their contexts. Part II of II. Lecture: 3 hours per week.

CST 160
Improvisation I
(3 credits)
Explores the basic techniques of improvisation through short and long form exercises and the study of the history of improvisation and improvisation theory and practices. Lecture: 3 hours per week.

CST 161
Improvisation II
(3 credits)
Explores the basic techniques of improvisation through short and long form exercises and the study of the history of improvisation and improvisation theory and practices. Includes more extensive study of long form and in-depth character development. Lecture: 3 hours per week.

CST 210
Theatre Aesthetics
(3 credits)
Introduces the study of theatre aesthetics through exploration into the theatrical theories, styles, dramaturgical structures, and types of dramatic literature, which have influenced playwriting and theatrical practice from the ancient Greek to Modern periods. Lecture: 3 hours per week.

CST 227
Business and Professional Communication
(3 credits)
Emphasizes principles and practical application to effective professional oral communication behaviors to include speaking, listening, and relating, and rhetorical sensitivity within professional, business, and organizational contexts. Lecture: 3 hours per week.

CST 228
Persuasion
(3 credits)
Studies practical message strategies and argumentation in such areas as business, politics, mass media, and campaigns. Emphasizes practical application. Lecture: 3 hours per week.

CST 229
Intercultural Communication
(3 credits)
Emphasizes the influence of culture on the communication process including differences in values, message systems, and communication rules. Lecture: 3 hours per week.

CST 231 – 232
History of Theatre I – II
(3 credits each)
Analyzes and studies theatre history to include architecture, performers and performance, playwrights, stage, production methods and audience from the Greeks through modern drama. Lecture: 3 hours per week.
CST 241
Introduction to Directing I
(3 credits each)
Introduces theory and practice of stage direction through the study of directing methods as well as the execution and discussion of directing exercises. Prerequisite CST 131-132 or SPD 131-132 or divisional approval. Part I of II. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CST 251
Stage Lighting and Sound
(3 credits)
Provides students with a basic understanding of the principles of stage lighting and sound. Instructs students in the fundamentals of stage lighting such as: functions of lighting, qualities of light, design, basic electricity, lighting instruments and equipment, board operation, and safety. Instructs students in the fundamentals of sound, equipment, design, and sound operation. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CST 252
Costume and Make-up for the Theatre
(3 credits)
Provides students with a basic understanding of the principles of costume and make-up for the theatre. Instructs in the fundamentals of costumes such as: function, research techniques, design, materials and construction. Instructs in the fundamentals of make-up such as: basic make-up techniques, supplies, and the design of straight, character, and special effect applications. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CST 267
Creative Drama
(3 credits)
Explores uses of drama through story dramatization, role-playing, and sensory exercises. Lecture: 3 hours per week.

CAD 152
Engineering Drawing Fundamentals II
(3 credits)
Introduces technical drafting from the fundamentals through advanced drafting practices. Includes lettering, geometric construction, technical sketching, orthographic projection, sections, intersections, development, fasteners. Teaches theory and application of dimensioning and tolerances, pictorial drawing, and preparation of drawings. Part II of II. (Credit will not be awarded for both CAD 152 and DRF 152.) Lecture: 1 hour. Laboratory: 4 hours. Total: 5 hours per week.

CAD 155
Fundamentals of Architectural Drafting
(3 credits)
Introduces fundamentals of architectural drafting and planning of functional buildings. Presents architectural lettering, symbols, and dimensioning, and working drawings including site plans, floor plans, elevations, sections, and details. Lecture: 2 hours and Laboratory: 3 hours. Total: 5 hours per week.

CAD 201
Computer Aided Drafting and Design I
(3 – 4 credits)
Teaches computer-aided drafting concepts and equipment designed to develop a general understanding of components of a typical CAD system and its operation. (Credit will not be awarded for both CAD 201 and DRF 201.) Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CAD 202
Computer Aided Drafting and Design II
(3 credits)
Teaches production drawings and advanced operations in computer aided drafting. (Credit will not be awarded for both CAD 202 and DRF 202.) Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CAD 231
Computer Aided Drafting I
(3 credits)
Teaches computer aided drafting concepts and equipment designed to develop a general understanding of components and operate a typical CAD system. (Credit will not be awarded for both CAD 231 and DRF 231.) Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CAD 235
Applications for Additive Manufacturing
(3 credits)
Teaches advanced skills in 3D parametric modeling for the purpose of digital and rapid prototyping and additive manufacturing. Focuses on proper techniques to construct 3D models and assemblies for 3D printing, molding, and casting. Lecture: 2 hours. Laboratory: 2 hours. Total: 4-hours per week.
CAD 241
Parametric Solid Modeling I
(3 credits)
Focuses on teaching students the design of parts by parametric solid modeling. Topics covered will include, but not limited to, sketch profiles; geometric and dimensional constraints; 3-D features; model generation by extrusion, revolution and sweep; and the creation of 2-D drawing views that include sections, details and auxiliary. Part I of II. (Credit will not be awarded for both CAD 241 and DRF 241.) Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CAD 260
Computer Applications for Surveyors and Technicians
(3 credits)
Studies and evaluates numerous COGO software and associated drafting packages. Includes calculations and drafting of traverse adjustment, subdivision, and curves. (Credit will not be awarded for both CAD 260 and DRF 260.) Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

CAD 262
Computer-Aided Civil Design and Hydrology
(3 credits)
Introduces computer-aided-design for civil/surveying as applied to highway design, site layout, advanced, highway design, hydrology tools, watershed analysis, and pipe sizing. (Credit will not be awarded for both CAD 262 and DRF 262.) Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

Contracting

CON 100
Shaping Business Arrangements
(3 credits)
Provides an introduction to environment in which contracts function. Develops professional skills for making business decisions and advising other acquisition team members in successfully meeting customers’ needs. Introduces students to the different acquisition contracting areas and the types of procurement alternatives that may be selected for each. Presents knowledge and information systems as well as recent acquisition initiatives. Lecture: 3 hours per week.

Dance

DAN 163
Jazz I
(1 credit)
Introduces dance through contemporary jazz movements. Includes floor stretches, isolations, dance patterns and locomotor movements. Part I of II. Laboratory: 2 hours per week.

DAN 164
Jazz II
(1 credit)
Introduces dance through contemporary jazz movements. Includes floor stretches, isolations, dance patterns and locomotor movements. Part II of II. Laboratory: 2 hours per week.

DAN 166
Ballet
(1 credit)
Teaches ballet as a discipline with correct alignment and ballet form. Expresses movement through traditional dance form with choreographic emphasis. Laboratory: 2 hours per week.

DAN 200
History of Modern Dance
(3 credits)
Explores the origin and development of modern dance, with concentration on American choreographers Doris Humphrey, Isadora Duncan and Martha Graham. Studies the cultural, intellectual and physical influences on the development of different techniques and movement theories as well as modern dance companies. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

Drafting

DRF 128
Geometric Dimensioning and Tolerancing
(2 credits)
Teaches use of a positional tolerance system, its relationship to coordinate tolerance systems, and other aspects of industry standard drafting practices. Lecture: 2 hours per week.

DRF 160
Machine Blueprint Reading
(3 credits)
Introduces interpreting of various blueprints and working drawings. Applies basic principles and techniques such as visualization of an object, orthogonal projection, technical sketching and drafting terminology. Requires outside preparation. Lecture: 3 hours per week.

Economics

ECO 120
Survey of Economics
(3 credits)
Presents a broad overview of economic theory, history, development and application. Introduces terms, definitions, policies and philosophies of market economies. Provides some comparison with other economic systems. Includes some degree of exposure to microeconomic and macroeconomic concepts. Lecture: 3 hours per week.
ECO 201
Principles of Macroeconomics
(3 credits)
Introduces macroeconomics, including the Keynesian, classical, monetarist principles and theories, the study of national economic growth, inflation, recession, unemployment, financial markets, money and banking and the role of government spending and taxation, along with international trade and investments. Lecture: 3 hours per week.

ECO 202
Principles of Microeconomics
(3 credits)
Introduces the basic concepts of microeconomics. Explores the free market concepts with coverage of economic models and graphs, scarcity and choices, supply and demand, elasticities, marginal benefits and costs, profits and production and distribution. Lecture: 3 hours per week.

Education

EDU 114
Driver Task Analysis
(3 credits)
Introduces the “driver task” as related to the highway transportation system and factors that influences performance ability. Prepares students so they may be eligible to take certification exams for driving school instructors in both public and private schools. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

EDU 200
Introduction to Teaching as a Profession
(3 credits)
Provides an orientation to the teaching profession in Virginia, including historical perspectives, current issues, and future trends in education on the national and state levels. Emphasizes information about teacher licensure examinations, steps to certification, teacher preparation and induction programs, and attention to critical shortage areas in Virginia. Includes supervised field placement (recommended: 40 clock hours) in a K – 12 school. Prerequisite: Successful completion of 24 credits of transfer courses. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

EDU 214
Instructional Principles of Driver Education
(3 credits)
Analyzes rules and regulations that govern the conduct of Driver Education programs with special emphasis on organization and administration. Includes use in the classroom, driving range and on the street. Prepares students so they may be eligible to take the state certification exam in driver education. Prerequisite: EDU 114. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

EDU 235
Health, Safety and Nutrition Education
(3 credits)
Focuses on the physical needs of children and explores strategies to meet these needs. Emphasizes positive health routines, hygiene, nutrition, feeding and clothing habits, childhood diseases and safety. Places emphasis on the development of food habits and concerns in food and nutrition. Describes symptoms and reporting procedures for child abuse. Lecture: 3 hours per week.

EDU 295 – Topics In
Managing Today’s Diverse Classroom
(3 credits)
Designed to increase teacher awareness of the needs of students from diverse backgrounds as well as learning strategies to positively manage those students and increase their academic success. Special attention will be given to the ethnic and economic diversity that teachers are likely to encounter in the schools. General approaches to understanding the needs that the students have as learners as well as appropriate strategies to help them be successful will be addressed. This course features techniques and strategies for understanding both the hidden and visible features of culture and developing ways to apply knowledge in working relationships with persons from various backgrounds. Lecture: 3 hours per week.

EDU 295 – Topics In
Engaging Students in Online Environments
(3 credits)
This course is designed to help classroom teachers increase their skills for teaching students inside of a learning management system (LMS) at their school. Concepts and strategies applicable to all LMS that focus on engaging students and teaching to different learning styles will be emphasized. Teachers will gain a better understanding of how to make classes more dynamic online. Lecture: 3 hours per week.

EDU 295 – Topics in
Understanding Students with Autism Spectrum Disorders
(3 credits)
This course is designed to help classroom teachers, school counselors, and other educational personnel gain an understanding of students with autism spectrum disorders. Classroom strategies and methodologies for reaching and teaching students with these disorders will be covered. Key information and current research about early identification and intervention will be addressed as well as the role of the school in collaboration and transition to adulthood. Lecture: 3 hours per week.
# Electrical Technology

## ELE 110
### Home Electric Power
(3 credits)
Covers the fundamentals of residential power distribution, circuits, panels, fuse boxes, breakers, transformers. Includes study of the national electrical code, purpose and interpretation. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

## ELE 118
### Practical Electricity
(2 credits)
Teaches fundamentals of electricity, terminology and symbols, diagrams, the principles essential to the understanding of general practices, safety and the practical aspects of residential and non-residential wiring, electrical installation. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

## ELE 127
### Residential Wiring Methods
(3 credits)
Studies wiring methods and standards used for residential dwellings. Provides practical experience in design, layout, construction, and testing of residential wiring systems by use of scaled mock-ups. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

## ELE 131
### National Electrical Code I
(3 credits)
Provides comprehensive study of the purpose and interpretations of the National Electric Code as well as familiarization and implementation of various charts, code rulings and wiring methods including state and local regulations. Lecture: 3 hours per week.

## ELE 135
### National Electrical Code - Residential
(3 credits)
Studies purposes and interpretations of the national electrical code that deals with single and multi-family dwellings, including state and local regulations. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

## ELE 137
### National Electrical Code – Industrial
(3 credits)
Provides comprehensive study of the purposes and interpretations of the National Electrical Code that deal primarily with industrial wiring methods, including state and local regulations. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

## ELE 138
### National Electrical Code Review I
(3 credits)
Covers purpose and interpretation of the National Electrical Code as well as various charts, code rulings and wiring methods. Prepares the student to take the journeyman-level exam. Lecture: 3 hours per week.

## ELE 150
### A.C. and D.C. Circuit Fundamentals
(4 credits)
Provides an intensive study of the fundamentals of direct and alternating current, resistance, magnetism, inductance and capacitance, with emphasis on practical applications. Focuses on electrical/machines applications. Lecture: 2 hours. Laboratory: 2 hours. Total: 5 hours per week.

## ELE 151
### Electrical Troubleshooting
(3 credits)
Teaches troubleshooting as applied to residential wiring and/or electrical appliances. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

## ELE 156
### Electrical Control Systems
(3 credits)
Includes troubleshooting and servicing electrical controls, electric motors, motor controls, motor starters, relays, overloads, instruments and control circuits. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

## ELE 159
### Electrical Motors
(3 credits)
Teaches practical applications and fundamentals of A.C. and D.C. machines. Includes the concepts of magnetism and generators used in electrical motor applications. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

## ELE 239
### Programmable Controllers
(3 credits)
Examines installation, programming, interfacing and concepts of troubleshooting programmable controllers. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

## ELE 240
### Advanced Programmable Logic Controllers
(3 credits)
Advances further study of Programmable Logic Controllers that was initiated in ELE 239. Students will learn to use more advanced program instructions, including data manipulation, sequences and program control, and advanced PLC features, including timers, counters. Covers connectivity and use of a variety of real world I/O devices. Prerequisite: ELE 239. Lecture: 2 hours. Laboratory: 1 hour. Total: 3 hours per week.
Emergency Medical Services

EMS 110
Emergency Vehicle Operator’s Course (EVOC) (1 credit)
Prepares the student for certification in the operation of various emergency vehicles. Teaches proper operating procedures in both emergency and non-emergency situations. Lecture: 1 hour per week.

EMS 111
Emergency Medical Technician – Basic I (7 credits)
Prepares student for certification as a Virginia and National Registry EMT-Basic. Focuses on all aspects of pre-hospital basic life support as defined by the Virginia Office of Emergency Medical Services curriculum for Emergency Medical Technician Basic. Prerequisite: EMS 100/ equivalent. Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 5 – 9 and must be eligible to enroll in ENG 111. Note: Students less than 18 years of age may enroll in the Emergency Medical Technician (BLS only) courses at age 16 with parental permission. Students less than 18 years of age who complete the course will be eligible for Virginia EMT certification only, and will not be eligible for National Registry Certification. Corequisite: EMS 120. Lecture: 5 hours. Laboratory: 4 hours. Total: 9 hours per week.

EMS 112
Emergency Medical Technician - Basic Clinical (4 credits)
Prepares student for certification as a Virginia and/or National Registry EMT-Basic. Focuses on all aspects of pre-hospital basic life support as defined by the Virginia Office of Emergency Medical Services curriculum for Emergency Medical Technician Basic. Lecture: 3 hours. Laboratory: 2 hours. Total: 5 hours per week.

EMS 120
Emergency Medical Technician - Basic Clinical (1 credit)
Observes in a program approved clinical/field setting. Includes topics for both EMS 111 and EMS 113, dependent upon the program in which the student is participating and is a corequisite to both EMS 111 and EMS 113. Prerequisite: Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 5 – 9 and must be eligible to enroll in ENG 111. Note: Students less than 18 years of age may enroll in the Emergency Medical Technician (BLS only) courses at age 16 with parental permission. Students less than 18 years of age who complete the course will be eligible for Virginia EMT certification only, and will not be eligible for National Registry Certification. Laboratory: 2 hours per week.

EMS 145
EMS Responses to Specialized Incidents (3 credits)
Prepares the student for Virginia Enhanced certification eligibility and begins the sequence for National Registry Intermediate and/or Paramedic certification. Includes the theory and application of the following: foundations, human systems, pharmacology, overview of shock, venous access, airway management, patient assessment, respiratory emergencies, allergic reaction, and assessment based management. Conforms at a minimum to the Virginia Office of Emergency Medical Services curriculum. Prerequisite: Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 5 – 9 and must be eligible to enroll in ENG 111. Corequisite: EMS 170. Lecture: 3 hours. Laboratory: 2 hours. Total: 5 hours per week.

EMS 151
Introduction to Advanced Life Support (4 credits)
Prepares the student for Virginia Enhanced certification eligibility and begins the sequence for National Registry Intermediate and/or Paramedic certification. Includes the theory and application of the following: foundations, human systems, pharmacology, overview of shock, venous access, airway management, patient assessment, respiratory emergencies, allergic reaction, and assessment based management. Conforms at a minimum to the Virginia Office of Emergency Medical Services curriculum. Prerequisite: Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 5 – 9 and must be eligible to enroll in ENG 111. Corequisite: EMS 170. Lecture: 3 hours. Laboratory: 2 hours. Total: 5 hours per week.

EMS 152
Advanced EMT Completion (2 credits)
Continues the Virginia Office of Emergency Medical Services Advanced, Intermediate and/or Paramedic curricula. Includes patient assessment, differential diagnosis and management of multiple complaints. Includes, but are not limited to conditions relating to diabetic, neurological, abdominal pain, environmental, behavioral, gynecology, and toxicological disease conditions. Also includes Advanced EMT level cardiac, trauma and special population topics. Prerequisites: Current EMT certification. Pre/Co-requisite: EMS 151. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

EMS 154
ALS Cardiac Care (2 credits)
Continues the Virginia Office of Emergency Medical Services Intermediate and/or Paramedic curricula. Includes Advanced Life Support (ALS) airway management, electrical therapy, pharmacology, drug and fluid administration with emphasis on patient assessment, differential diagnosis and management of cardiovascular emergencies. It will incorporate the current American Heart Association (AHA) - ACLS guidelines and curriculum including stroke management. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.
EMS 153  
**Basic ECG Recognition**  
(2 credits)  
Focuses on the interpretation of basic electrocardiograms (ECG) and their significance. Includes an overview of anatomy and physiology of the cardiovascular system including structure, function and electrical conduction in the heart. Covers advanced concepts that build on the knowledge and skills of basic dysrhythmia determination and introduction to 12 lead ECG. Prerequisite: Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 1 – 4 and must be eligible to enroll in ENG 111. Lecture: 2 hours per week.

EMS 155  
**ALS – Medical Care**  
(4 credits)  
Continues the Virginia Office of Emergency Medical Services Intermediate and/or Paramedic curricula. Includes ALS pharmacology, drug and fluid administration with emphasis on patient assessment, differential diagnosis and management of multiple medical complaints. Includes, but are not limited to conditions relating to cardiac, diabetic, neurological, non-traumatic abdominal pain, environmental, behavioral, gynecology, and toxicological disease conditions. Prerequisites: Current EMT-B certification, EMS 151 and EMS 153. Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 1 – 4 and must be eligible to enroll in ENG 111. Lecture: 3 hours. Laboratory: 2 hours. Total: 5 hours per week.

EMS 157  
**ALS – Trauma Care**  
(3 credits)  
Continues the Virginia Office of Emergency Medical Services Intermediate and/or Paramedic curricula. Utilizes techniques which will allow the student to utilize the assessment findings to formulate a field impression and implement the treatment plan for the trauma patient. Prerequisites: Current EMT-B certification and EMS 151. Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 1 – 4 and must be eligible to enroll in ENG 111. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

EMS 159  
**ALS – Special Populations**  
(3 credits)  
Continues the Virginia office of Emergency Medical Services Intermediate and/or Paramedic curricula. Focuses on the assessment and management of specialty patients including obstetrical, neonates, pediatric, and geriatrics. Prerequisites: EMS 151 and EMS 153. Prerequisite or corequisite: EMS 155. Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 1 – 4 and must be eligible to enroll in ENG 111. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

EMS 170  
**ALS Internship I**  
(1 credit)  
Begins the first in a series of clinical experiences providing supervised direct patient contact in appropriate patient care facilities in and out of hospitals. Includes but not limited to patient care units such as the emergency department, critical care units, pediatric, labor and delivery, operating room, trauma centers and various advanced life support units. Prerequisite: Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 1 – 4 and must be eligible to enroll in ENG 111. Laboratory: 3 – 6 hours per week.

EMS 172  
**ALS Clinical Internship II**  
(1 credit)  
Continues with the second in a series of clinical experiences providing supervised direct patient contact in appropriate patient care facilities in and out of hospitals. Includes but not limited to patient care units such as the emergency department, critical care units, pediatric, labor and delivery, operating room and trauma centers. Prerequisite: Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 1 – 4 and must be eligible to enroll in ENG 111. Corequisite: EMS 151. Laboratory: 3 – 6 hours per week.

EMS 173  
**ALS Field Internship II**  
(1 credit)  
Continues with the second in a series of field experiences providing supervised direct patient care in out-of-hospital advanced life support units. Prerequisite: Before enrolling in this EMS course, students MUST complete or test out of MTE Modules 1 – 4 and must be eligible to enroll in ENG 111. Laboratory: 3 hours per week.

EMS 213  
**ALS Skills Development**  
(1 credit)  
Utilizes reinforcement and remediation of additional advanced life support skills, as needed. Laboratory: 2 hours per week.

EMS 215  
**Registry Review**  
(1 credit)  
Reviews material covered in the intermediate/paramedic program. Prepares the student for National Registry testing. Lecture: 1 hour per week.
Engineering

EGR 120
Introduction to Engineering
(2 credits)
Introduces the engineering profession, professional concepts, ethics, and responsibility. Reviews hand calculators, number systems, and unit conversions. Introduces the personal computer and operating systems. Includes engineering problem-solving techniques using computer software. Lecture: 2 hours.

EGR 126
Computer Programming for Engineers
(3 credits)
Introduces computers, their architecture and software. Teaches program development using flowcharts. Solves engineering problems involving programming in languages such as FORTRAN, PASCAL, or C++. Lecture: 3 hours.

EGR 140
Engineering Mechanics: Statics
(3 credits)
Introduces mechanics of vector forces and space, scalar mass and time, including S.I. and U.S. customary units. Teaches equilibrium, free-body diagrams, moments, couples, distributed forces, centroids, moments of inertia analysis of two-force and multi-force members. Prerequisite: MTH 116 or MTH 164 or by permission of the instructor. Lecture: 3 hours per week.

EGR 216
Computer Methods in Engineering and Technology
(3 credits)
Provides advanced level experience in using a computer as a tool for solving technical problems and performing office functions. Includes computer hardware and operating system usage, structured programming in a selected high level language, use of word processing software, computer graphics and spreadsheets. Focuses on the analysis and solution of problems in engineering and technology. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

EGR 245
Engineering Mechanics – Dynamics
(3 credits)
Presents approach to kinematics of particles in linear and curvilinear motion. Includes kinematics of rigid bodies in plane motion. Teaches Newton’s second law, work-energy and power, impulse and momentum, and problem solving using computers. Lecture: 3 hours per week.

EGR 246
Mechanics of Materials
(3 credits)
Teaches concepts of stress, strain, deformation, internal equilibrium, and basic properties of engineering materials. Analyzes axial loads, torsion, bending, shear and combined loading. Studies stress transformation and principle stresses, column analysis and energy principles. Lecture: 3 hours per week.

EGR 248
Thermodynamics for Engineering
(3 credits)
Studies formulation of the first and second law of thermodynamics. Presents energy conversion, concepts of energy, temperature, entropy, and enthalpy, equations of state of fluids. Covers reversibility and irreversibility in processes, closed and open systems, cyclical processes and problem solving using computers. Lecture: 3 hours per week.

English

ENG 111
College Composition I
(3 credits)
Introduces students to critical thinking and the fundamentals of academic writing. Through the writing process, students refine topics; develop and support ideas; investigate, evaluate, and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. Writing activities will include exposition and argumentation with at least one researched essay. Prerequisite: MTH 116 or MTH 164 or by permission of the instructor. Lecture: 3 hours per week.

ENG 112
College Composition II
(3 credits)
Continues to develop college writing with increased emphasis on critical essays, argumentation, and research, developing these competencies through the examination of a range of texts about the human experience. Requires students to locate, evaluate, integrate, and document sources and effectively edit for style and usage. Prerequisite: ENG 111. Total: 3 hours per week.

ENG 115
Technical Writing
(3 credits)
Develops ability in technical writing through extensive practice in composing technical reports and other documents. Guides students in achieving voice, tone, style and content in formatting, editing and graphics. Introduces students to technical discourse through selected reading. Prerequisite: ENF 1 or ENF 2. Total: 3 hours per week.
ENG 121
Introduction to Journalism I
(3 credits)
Introduces students to all news media, especially news gathering and preparation for print. Prerequisite: ENG 111 or 112 or divisional approval. Part I of II. Lecture: 3 hours per week.

ENG 210
Advanced Composition
(3 credits)
Helps students refine skills in writing non-fiction prose. Guides development of individual voice and style. Introduces procedures for publication. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 211 – 212
Creative Writing I – II
(3 credits each)
Introduces the student to the fundamentals of writing imaginatively. Students write in forms to be selected from poetry, fiction, drama and essays. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 217
Creative Writing - Poetry I
(3 credits)
Introduces the fundamentals and techniques of writing poetry. Part I of II. Lecture: 3 hours per week.

ENG 236
Introduction to the Short Story
(3 credits)
Examines selected short stories emphasizing the history of the genre. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 241 – 242
Survey of American Literature I – II
(3 credits each)
Examines American literary works from Colonial times to the present, emphasizing the ideas and characteristics of our national literature. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 243 – 244
Survey of English Literature I – II
(3 credits each)
Studies major English works from the Anglo-Saxon period to the present, emphasizing ideas and characteristics of the British literary tradition. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 246
Major American Writers
(3 credits)
Examines major writers of American literary history. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 247
Survey of Popular Culture
(3 credits)
Analyzes familiar aspects of American culture, as seen through popular literature, with additional emphasis on television, film and popular art. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 250
Children’s Literature
(3 credits)
Surveys the history, development and genres of children’s literature, focusing on analysis of texts for literary qualities and in terms of audience. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 251 – 252
Survey of World Literature I – II
(3 credits each)
Examines major works of world literature. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 253 – 254
Survey of African – American Literature I – II
(3 credits each)
Examines selected works by Black American writers from the colonial period to the present. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 255
Major Writers in World Literature
(3 credits)
Examines major writers selected from a variety of literary traditions. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 256
Literature of Science Fiction
(3 credits)
Examines the literary and social aspects of science fiction, emphasizing development of ideas and techniques through the history of the genre. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.
ENG 257
Mythology
(3 credits)
Studies selected mythologies of the world, emphasizing their common origins and subsequent influence on human thought and expression. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 268
The Modern Drama
(3 credits)
Studies the modern drama. Emphasizes the understanding and enjoyment of dramatic literature. Requires critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 271 – 272
The Works of Shakespeare I – II
(3 credits each)
Examines selected works of Shakespeare. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 273 – 274
Women in Literature I – II
(3 credits each)
Examines literature by and about women. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 276
Southern Literature
(3 credits)
Examines the themes and techniques of selected writers dealing with the American South as a distinctive cultural entity. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENG 279
Film and Literature
(3 credits)
Examines the translation of literature into film viewing and writing. Prerequisite: ENG 112 or divisional approval. Lecture: 3 hours per week.

ENF 1
Preparing for College English I
(8 credits)
Provides integrated reading and writing instruction for students who require extensive preparation to succeed in college-level English courses. Students will place into the course based on placement test score. Upon successful completion and faculty recommendation, students will move into Preparing for College English III (if they require additional preparation) or into college-level English (if they require no additional preparation). Credit is not applicable toward graduation. Lecture: 8 hours per week.

ENF 2
Preparing for College English II
(4 credits)
Provides integrated reading and writing instruction for students who require intermediate preparation to succeed in college-level English courses. Students will place into the course based on placement test score. Upon successful completion and faculty recommendation, students will move into Preparing for College Level III (if they require additional preparation) or into college-level English (if they require no additional preparation). Credit is not applicable toward graduation. Lecture: 4 hours per week.

ENF 3
Preparing for College English III
(2 credits)
Provides integrated reading and writing instruction for students who require minimal preparation for college-level English but still need some preparation to succeed. Students in this course will be co-enrolled in college-level English. Students will place into this course based on placement test score. Credit is not applicable toward graduation. Corequisite: ENG 111. Lecture: 2 hours per week.

ENV 40
Basic Certification Preparation: Wastewater
(1 credit)
Reviews materials which normally are associated with the wastewater treatment plant operator’s Class IV or Class III level certification examinations. Utilizes lecture, audiovisual and workshop sessions to review required materials and to prepare the trainee to complete the wastewater operator examinations. Prerequisite: divisional approval. Laboratory: 2 hours per week.
ENV 121  
General Environmental Science I  
(4 credits)  
Explores fundamental components and interactions that make up the natural systems of the earth. Introduces the basic science concepts in the discipline of biological, chemical, and earth sciences that are necessary to understand and address environmental issues. Part I of II. Lecture: 3 hours. Recitation and Laboratory: 3 hours. Total: 6 hours per week.

ENV 122  
General Environmental Science II  
(4 credits)  
Explores fundamental components and interactions that make up the natural systems of the earth. Introduces the basic science concepts in the disciplines of biological, chemical, and earth sciences that are necessary to understand and address environmental issues. Part II of II. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

ENV 136  
Survey of Environmental Concerns  
(3 credits)  
Studies the relationship of man to his physical environment, ecological principles and public health. Topics of current importance include air pollution, potable water, waste disposal, communicable disease, poisoning and toxicity and radiation with particular emphasis on community action programs. Lecture: 3 hours per week.

ENV 146  
Advanced Certification Preparation: Wastewater  
(1 credit)  
Reviews the materials associated with the wastewater treatment plant operator’s Class II or Class I level certification examinations. Consists of lecture, audiovisual and workshop sessions to review the required material and to prepare the trainee to complete the wastewater operator’s examination. Prerequisite: divisional approval. Laboratory: 2 hours per week.

ENV 220  
Environmental Problems  
(3 credits)  
Studies the relationship of man to his environment; ecological principles, population dynamics, topics of current importance including air, water and noise pollution; poisoning and toxicity, radiation, conservation and management of natural resources. Lecture: 3 hours per week.

Financial Services

FIN 107  
Personal Finance  
(3 credits)  
Presents a framework of personal money management concepts, including establishing values and goals, determining sources of income, managing income, preparing a budget, developing consumer buying ability, using credit, understanding savings and insurance, providing for adequate retirement, and estate planning. Lecture: 3 hours per week.

French

FRE 101 – 102  
Beginning French I – II  
(4 credits)  
Introduces understanding, speaking, reading and writing skills and emphasizes basic French sentence structure. Lecture: 4 hours per week. May include one additional hour of oral practice per week.

FRE 201-202  
Intermediate French I – II  
(3 credits each)  
Continues to develop understanding, speaking, reading and writing skills. French is used in the classroom. Prerequisite: FRE 102 or equivalent. Lecture: 3 hours per week. May include one additional hour of oral practice per week.

Funeral Services

FNS 110  
Introduction to Funeral Service  
(3 credits)  
Presents a comprehensive study of the history of funeral service, commencing with the practices of the Egyptians, early Christians, Romans, and Hebrews. traces funeral practice from its early pagan origins to the modern practices of today. May include the study of the sociology of funeral service. Lecture: 3 hours per week.

FNS 111  
Theory of Embalming I  
(3 credits)  
Introduces the purpose and historical background of embalming. Teaches the ethics and sanitary consideration in the handling of human remains, signs and tests of deaths, and postmortem changes in the body. Corequisite: FNS 113. Lecture: 3 hours per week.
FNS 112  
Theory of Embalming II  
(3 credits)  
Presents pre-embalming diagnosis, positioning the body and posing the features, linear and anatomical guides for selected blood vessels, and factors that influence fluid distribution and blood drainage. Prerequisites: FNS 111, FNS 113. Corequisite: FNS 114. Lecture: 3 hours per week.

FNS 113  
Theory of Embalming Laboratory I  
(1 credit)  
Teaches the basic procedures of embalming. Presents instruments, equipment, and the types of preservatives and disinfectant chemicals used in embalming. Corequisite: FNS 111. Laboratory: 3 hours per week.

FNS 114  
Theory of Embalming Laboratory II  
(1 credit)  
Teaches through practice and demonstration of various embalming techniques. May include clinical experiences in area funeral homes. Prerequisites: FNS 111, FNS 113. Corequisite: FNS 112. Laboratory: 3 hours per week.

FNS 121  
Anatomy for Funeral Service I  
(3 credits)  
Introduces anatomy and physiology and basic terminology. Presents information about cells, tissues and organs systems. Discusses all systems with emphasis placed on muscular, skeletal and circulatory. Lecture: 3 hours per week.

FNS 125  
Microbiology for Funeral Service  
(3 credits)  
Focuses on microscopic forms of life from a morphological, cultural and staining viewpoint. Studies in detail causative agents of disease and their importance to a scientific approach to sanitation. Stresses the need for scientific knowledge concerning disease and its cause. Lecture: 3 hours per week.

FNS 126  
Pathology for Funeral Service  
(3 credits)  
Introduces the general processes of disease, stressing their importance to the scientific embalmer and funeral director as health guardians. Studies diseases of specific organs and organ systems with emphasis on the significant structural changes involved and the embalming problems they present. Lecture: 3 hours per week.

FNS 211  
Restorative Art I  
(3 credits)  
Presents surface contour; the influence of the bone structure on facial form; and the effect of the facial muscles on the wrinkles, grooves, and folds of the face. Teaches the treatments and techniques for restorations. Introduces wax and non-wax treatments such as swellings, feature corrections, and hair restoration. Studies lip- waxing techniques and the modeling of various forms of the mouth and eyes. Teaches the rudiments of cosmetic knowledge and techniques through lectures, demonstrations, and student participation. Prerequisite: Sophomore standing. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

FNS 212  
Restorative Art II  
(3 credits)  
Studies color principles and their application to funeral work and the funeral establishment. Teaches the basic principles employed in recreating the personalized form and dimensions of each facial feature when restoration is necessary. Focused on problem cases which require illusory corrections, matching wax color skin, and the masking of small and extensive discolorations. Teaches feature construction with restorative wax through demonstrations and laboratory practice. Lecture: 2 hours. Laboratory: 2 hours. Total 4: hours per week.

FNS 231  
Principles of Funeral Management I  
(4 credits)  
Introduces the basic social, religious, ethical and psychological factors that influence funeral service. Teaches telephone techniques and etiquette and acceptable funeral terminology. Studies the various types of religious, fraternal and military funeral services. Prerequisite: sophomore standing. Lecture: 4 hours per week.

FNS 232  
Principles of Funeral Management II  
(4 credits)  
Teaches merchandising, the principles of buying and selling and the techniques of making funeral arrangements. Studies the construction and proper selection of casket, room arrangement and social security and veterans’ benefits. Focuses on modern funeral establishment management techniques and procedures. Prerequisite: FNS 231. Lecture: 4 hours per week.

FNS 236  
Funeral Service Law  
(3 credits)  
Focuses on the duties, rights, responsibilities, and liabilities of the funeral director and embalmer. Teaches building and zoning ordinances relating to the funeral establishment, tort liability, cemetery law, wills, and the administration of estates. May include the study of state laws as they pertain to funeral services. Lecture: 3 hours per week.
FNS 245
Ethics
(3 credits)
Provides a review of the Funeral Service curriculum by administering a series of exams on required content that the student must successfully pass. Allows students to choose and develop an expanded outline of one specific topic in Funeral Services which will be included in the final grade. Includes a required section on ethics in the field of Funeral Services and prepares the student to sit for the national and state licensing examinations. Lecture: 3 hours per week.

Fire Science Technology

FST 100
Principles of Emergency Services
(3 credits)
Provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function to public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics. Lecture: 3 hours per week.

FST 110
Fire Behavior and Combustion
(3 credits)
Explores the theories and fundamentals of how and why fires start, spread, and how they are controlled. Lecture: 3 hours per week.

FST 112
Hazardous Materials Chemistry
(3 credits)
Provides basic fire chemistry relating to the categories of hazardous materials including problems of recognition, reactivity, and health encountered by firefighters. Lecture: 3 hours per week.

GEO 200
Introduction to Physical Geography
(3 credits)
Studies major elements of the natural environment including earth sun relationship, land forms, weather and climate, natural vegetation and soils. Introduces the student to types and uses of maps. Lecture: 3 hours per week.

GEO 210
People and the Land: An Introduction to Cultural Geography
(3 credits)
Focuses on the relationship between culture and geography. Presents a survey of modern demographics, landscape modification, material and non-material culture, language, race and ethnicity, religion, politics and economic activities. Introduces the student to types and uses of maps. Lecture: 3 hours per week.

GEO 220
World Regional Geography
(3 credits)
Studies physical and cultural characteristics of selected geographical regions of the world. Focuses upon significant problems within each of the regions, and examines the geographical background of those problems. Introduces the student to types and uses of maps. Lecture: 3 hours per week.

Geographic Information Systems

GIS 101
Introduction to Geospatial Technology I
(3 credits)
Provides an introduction to the concepts of Geographic Information Systems (GIS), Global Positioning Systems, (GPS) and remote sensing components of Geospatial Technology. Teaches the introductory concepts of geographic location and problem solving by using GIS and GPS units in demonstrating solutions to cross-curricular applications of the technology. Part I of II. Prerequisite: Basic Computer Literacy. Lecture: 3 hours per week.

GIS 102
Introduction to Geospatial Technology II
(3 credits)
Continues with the concepts of Geographic Information Systems (GIS), Global Positioning Systems (GPS) and remote sensing components of Geospatial Technology. Covers additional concepts of geographic location and problem solving by using GIS and GPS units in demonstrating solutions to cross-curricular applications of the technology. Part II of II. Prerequisite: Basic Computer Literacy. Lecture: 3 hours per week.
GIS 200  
Geographical Information Systems I  
(3 - 4  credits)  
Provides hands-on introduction to a dynamic desktop GIS  
(Geographic Information System). Introduces the components of  
a desktop GIS and their functionality. Emphasizes manipulation  
of data for the purpose of analysis, presentation, and decision-  
making. Prerequisite: ITE 115 or ITE 119 or equivalent.  
Lecture: 3 hours. Laboratory: 2 hours. Total: 5 hours per week.

Geology

GOL 105  
Physical Geology  
(4 credits)  
Introduces the composition and structure of the earth and  
modifying agents and processes. Investigates the formation of  
minerals and rocks, weathering, erosion, earthquakes and crustal  
deformation. Lecture: 3 hours. Laboratory: 3 hours. Total: 6  
hours per week.

German

GER 101  
Beginning German I  
5 credits  
Introduces understanding, speaking, reading, and writing  
skills and emphasizes basic German sentence structures.  
Part I of II. Lecture: 5 hours per week. May include one  
additional hour oral practice per week.

GER 102  
Beginning German II  
5 credits  
Introduces understanding, speaking, reading, and writing  
skills and emphasizes basic German sentence structures.  
Part II of II. Lecture: 5 hours per week. May include one  
additional hour oral practice per week. Prerequisite: GER 101.

GER 201  
Intermediate German I  
3 credits  
Continues to develop understanding, speaking, reading,  
and writing skills. German is used in the classroom.  
Prerequisite: GER 102 or equivalent. Part I of II. Lecture:  
3 hours per week. May include one additional hour  
oral practice per week.

GER 202  
Intermediate German II  
3 credits  
Continues to develop understanding, speaking, reading,  
and writing skills. German is used in the classroom.  
Prerequisite: GER 201 or equivalent. Part II of II. Lecture:  
3 hours per week. May include one additional hour  
oral practice per week.

Health

HLT 106  
First Aid and Safety  
(2 credits)  
Focuses on the principles and techniques of safety and first aid.  
Lecture: 2 hours per week.

HLT 110  
Concepts of Personal and Community Health  
(2 credits)  
Studies the concepts related to the maintenance of health, safety,  
and the prevention of illness at the personal and community  
level. Lecture: 2 hours per week.

HLT 116  
Personal Wellness  
(2 credits)  
Familiarizes students with the components of wellness, including  
nutrition, weight control, stress management and physical  
conditioning. Includes a personal wellness plan. Lecture: 3 hours  
per week.

HLT 120  
Foundations and Principles of Sport Coaching  
(3 credits)  
Explores the foundational knowledge applicable to sports  
coaching. Presents an overview based on current sport science.  
Covers the coaching areas of philosophy, pedagogy, physical  
training, behavioral analysis, and risk management. Includes  
principles and techniques of coaching. Covers a review of local  
athletic policies, procedures, regulations, and rules. Fulfills the  
VHSL Component and the coaching Principles Component  
required by the state of Virginia for coaching. Lecture: 3 hours  
per week.

HLT 143  
Medical Terminology I  
(3 credits)  
Provides an understanding of medical abbreviations and terms.  
Includes the study of prefixes, suffixes, word stems and technical  
terms with emphasis on proper spelling, pronunciation and  
usage. Emphasizes more complex skills and techniques in  
understanding medical terminology. Lecture: 3 hours per week.

HLT 156  
Health Care for Athletic Injuries  
(3 credits)  
Teaches prevention and care of athletic injuries, recognition  
and management of head and spinal injuries, fractures, strains,  
sprains, as well as cardiac emergencies. Discusses taping,  
protective equipment, and medical referral. Lecture: 3 hours per  
week.
HLT 160
Personal Health and Fitness
(3 credits)
Studies the relationships between health and fitness. Topics include nutrition, disease prevention, weight control, smoking and health, medical care, aerobic and anaerobic conditioning, and the relationship between physical and mental health. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

HLT 200
Human Sexuality
(3 credits)
Provides a basic understanding of human sexuality. Includes anatomy, physiology, pregnancy, family planning, venereal diseases, and sexual variations. Lecture: 3 hours per week.

HLT 204
Women's Health
(3 credits)
Explores current issues related to women's health and wellness with an emphasis upon prevention of disease and optimum well being. Takes a multi-ethnic approach to exploring the most up-to-date findings, diagnostic tools and treatments for breast cancer, reproductive tract illness, heart and other common diseases faced by women from puberty through menopause. Lecture: 3 hours per week.

HLT 206
Exercise Science
(3 credits)
Surveys scientific principles, methodologies, and research as applied to exercise and physical fitness. Emphasizes physiological responses and adaptations to exercise. Addresses basic elements of kinesiology, biomechanics, and motor learning. Presents an introduction to the physical fitness industry. Lecture: 3 hours per week.

HLT 208
Fitness and Exercise Training
(3 credits)
Introduces techniques for conducting physical fitness assessments and includes an introduction to electrocardiography. Emphasizes tests of Cardiorespiratory fitness, muscular strength and endurance, joint flexibility, body composition, and pulmonary capacity. Emphasizes the safety guidelines and precautions used in testing. Covers equipment use and maintenance. Prerequisite: HLT 100 or approval of instructor. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

HLT 215
Personal Stress and Stress Management
(3 credits)
Provides a basic understanding of stress and its physical, psychological, and social effects. Includes the relationships between stress and change, self-evaluation, sources of stress, and current coping skills for handling stress. Lecture: 3 hours per week.

HLT 230
Principles of Nutrition and Human Development
(3 credits)
Teaches the relationship between nutrition and human development. Emphasizes nutrients, balanced diet, weight control and the nutritional needs of an individual. Lecture: 3 hours per week.

HLT 295
Advanced Topics in Exercise Science
(3 credits)
Provides an opportunity to explore topical areas of interest to or needed by students. May be used also for special honors courses. May be repeated for credit. Lecture: 3 hours per week.

History

HIS 101 – 102
History of Western Civilization I – II
(3 credits each)
Examines the development of western civilization from ancient times to the present. The first semester ends with the seventeenth century; the second semester continues through modern times. Lecture: 3 hours per week.

HIS 111 – 112
History of World Civilization I – II
(3 credits each)
Surveys Asian, African, Latin American and European civilizations from the ancient period to the present. Lecture: 3 hours per week.

HIS 121 – 122
United States History I – II
(3 credits each)
Surveys United States history from its beginning to the present. Lecture: 3 hours per week.

HIS 141 – 142
African-American History I – II
(3 credits each)
Surveys the history of black Americans from their African origins to the present. Lecture: 3 hours per week.

HIS 183
Survey of Museum Practice
(3 credits)
Explores the role of the museum in society and traces the foundations upon which these public, cultural and educational institutions are built. Emphasizes the management and interpretation of historic properties and collections. This course is cross-listed with ART 184. Credit will not be awarded for both. Lecture: 3 hours per week.
HIS 185
Introduction to Museum Education
(3 credits)
Explores the basic elements of museum education, the different programming techniques museums use to reach all types of audiences, and the ways museums identify audiences. This course is cross-listed with ART 185. Credit will not be awarded for both. Lecture: 3 hours per week.

HIS 186
Collections Management
(3 credits)
Discusses the fundamentals of collections policy, deaccessioning, appraisal, and curatorial management. This course is cross-listed with ART 186. Credit will not be awarded for both. Lecture: 3 hours per week.

HIS 203
History of African Civilization
(3 credits)
Examines major social, economic, political and religious developments from earliest times to the present. Lecture: 3 hours per week.

HIS 211
History of England
(3 credits)
Surveys the history of the British Isles from pre-Celtic times to the present. Lecture: 3 hours per week.

HIS 225
Topics in European History I
(3 credits each)
Examines selected topics in the history of Europe from ancient times to the present. Part I or II Lecture: 3 hours per week.

HIS 226
Topics in European History II
(3 credits)
Examines selected topics in the history of Europe from ancient times to the present. Part II or II Lecture: 3 hours per week.

HIS 243 – 244
History of the Ancient World I – II
(3 credits each)
Studies the history of the ancient world from the dawn of civilization in the Near East to the fall of Rome. Lecture: 3 hours per week.

HIS 269
Civil War and Reconstruction
(3 credits)
Studies factors that led to the division between the states. Examines the war, the home fronts and the era of Reconstruction. Lecture: 3 hours per week.

HIS 276
United States History since World War II
(3 credits)
Investigates United States history from 1945 to the present, studying both domestic developments and American involvement in international affairs. Lecture: 3 hours per week.

HIS 281 – 282
History of Virginia I – II
(3 credits each)
Examines the cultural, political, and economic history of the Commonwealth from its beginning to the present. Lecture: 3 hours per week.

HIS 296
Museum Internship
(3 credits)
Internship without pay with an approved museum, collection, or historic site, supervised and coordinated by the college. Credit/work ratio not to exceed 1:5 hours. May be repeated for credit. Variable hours

Human Services

HMS 100
Introduction to Human Services
(3 credits)
Introduces human service agencies, roles and careers. Presents a historical perspective of the field as it relates to human services today. Additional topics include values clarification and needs of target populations. Lecture: 3 hours per week.

HMS 106
Working with Death and Dying
(3 credits)
Studies the hospice concept emphasizing the management of providing services associated with terminal illness, while providing human services for the family as well as the patient. Explores the unique role of each member of the hospice care team as to how each assists the patient and family in coping with the effects of the illness. Emphasizes understanding grief and loss. Focuses on the dying person and emphasizes the social and moral aspects of death and dying. Lecture: 3 hours per week.

HMS 121
Basic Counseling Skills I
(3 credits)
Develops skills needed to function in a helping relationship. Emphasizes skills in attending, listening and responding. Clarifies personal skill strengths, deficits and goals for skill improvement. Prerequisite: HMS 100. Lecture: 3 hours per week.
HMS 225  
**Functional Family Intervention**  
(3 credits)  
Provides an understanding of functions and dysfunctions within the family. Emphasizes the development of effective skills through an interpersonal/interactional approach to family intervention. Lecture: 3 hours per week.

HMS 226  
**Helping Across Cultures**  
(3 credits)  
Provides an historical overview of selected cultural and racial groups. Promotes understanding of group differences and the impact on counseling services. Lecture: 3 hours per week.

HMS 227  
**The Helper as a Change Agent**  
(3 credits)  
Teaches the following skills for implementing alternative models of change and influence: action research, problem-solving, consultation, workshop development and outreach and advocacy for diverse client populations. Prerequisite: HMS 100. Lecture: 3 hours per week.

HMS 236  
**Gerontology**  
(3 credits)  
Examines the process of aging; its implications in relation to health, recreation, education, transportation, meaningful work or activity and to community resources. Emphasizes experiencing the aging process, facilitating retirement and application of the helping relationship to work with older adults. Prerequisite: HMS 100. Lecture: 3 hours per week.

HMS 251  
**Substance Abuse I**  
(3 credits)  
Provides knowledge, skills and insight for working in drug and alcohol abuse programs. Emphasizes personal growth and client growth measures in helping relationships. Stresses various methods of individual and group techniques for helping the substance abuser. Lecture: 3 hours per week.

HMS 252  
**Substance Abuse II**  
(3 credits)  
Expands knowledge and skill in working with the substance abuser. Focuses on assisting substance abusers in individual and group settings and explores client treatment modalities. May provide opportunities for field experience in treatment centers. Prerequisite: HMS 251. Lecture: 3 hours per week.

HMS 258  
**Case Management and Substance Abuse**  
(3 credits)  
Focusses on the process for interviewing substance abuse clients. Includes intake, assessment, handling denial and ending the interview. Teaches skills for writing short-term goals and treatment plans with emphasis on accountability. Examines various reporting devices. Lecture: 3 hours per week.

**Humanities**

HUM 201  
**Survey of Western Culture I**  
(3 credits)  
Studies thought, values and arts of Western culture, integrating major developments in art, architecture, literature, music and philosophy. Covers the following periods: ancient and classical, early Christian and Byzantine, medieval and early renaissance. Lecture: 3 hours per week.

HUM 202  
**Survey of Western Culture II**  
(3 credits)  
Studies thought, values and arts of Western culture, integrating major developments in art, architecture, literature, music and philosophy. Covers the following periods: Renaissance, Baroque, enlightenment, romantic and modern. Lecture: 3 hours per week.

HUM 210  
**Introduction to Women’s Studies**  
(3 credits)  
Introduces interdisciplinary and cross-cultural theories that explore gender, race, and class issues relating to women’s lives, past and present. Prerequisite: ENG 112. Lecture: 3 hours per week.

HUM 241 – 242  
**Interdisciplinary Principles of the Humanities I – II**  
(3 credits each)  
Integrates unifying principles of the humanities and related fields of study. Emphasizes the expansion of student’s intellectual perspective and development of concepts enabling the integration of knowledge from diverse fields into a unified whole. Lecture: 3 hours per week.
Industrial Engineering Technology

IND 101
Quality Assurance Technology I
(3 credits)
Studies principles and techniques of quality engineering for the management, design engineering economics, production and assurance of quality. Emphasizes fundamentals of total quality assurance for product and process control. May include design review, fundamentals of statistics procurement control, sampling and control chart systems, quality reporting, process capability analysis, tool and gauge control, document control or troubleshooting quality control. Prerequisite: MTH 103 or equivalent. Lecture: 3 hours per week.

IND 105
NDI and Testing
(3 credits)
Studies nondestructive inspection and testing methods as they relate to industry. May include radiographic (RT), ultrasonic (UT), eddy current (ET), magnetic particle (MT), and liquid penetrant (PT) or other methods of testing. Lecture: 3 hours per week.

IND 116
Applied Technology
(3 credits)
Introduces basic information and problem-solving techniques in liquids, gases, solids, metrics, mechanics, forces, simple machines, heat, light, sound and nuclear energy as applied in industrial engineering technologies. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

IND 125
Installation and Preventive Maintenance
(3 credits)
Studies practices in the installation of machinery, including mounting, grouting, leveling, and alignment. Examines methods of preventive maintenance including inspection, scheduled maintenance, controls, record keeping, repair parts stocking, and safety considerations. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

IND 137
Team Concepts and Problem Solving
(3 credits)
Studies team concepts and problem-solving techniques to assist project teams in improving quality and productivity. Provides knowledge of how to work as a team, plan and conduct good meetings, manage logistics and details, gather useful data, communicate the results and implement changes. Lecture: 3 hours per week.

IND 160
Introduction to Robotics
(3 credits)
Studies evolution and history of robotics with an emphasis on automated and flexible manufacturing. Presents advantages and limitations of present robot systems. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

IND 181
World Class Manufacturing I
(3 credits)
Studies the principles and applications of the globalization of industry. Emphasizes the fundamentals of interpersonal/team process, organization skills, total quality tools for continuous improvement, statistical process control, manufacturing resource planning and just-in-time. Lecture: 3 hours per week.

IND 197
Cooperative Education
(1-5 credits)
Supervises in on-the-job training for pay in approved business, industrial and service firms, coordinated by the college’s cooperative education office. Is applicable to all occupational-technical curricula at the discretion of the college. Credit/ work ratio not to exceed 1:5 hours. May be repeated for credit. Variable hours.

IND 250
Introduction to Basic Computer Integrated Manufacturing
(3 credits)
Presents basic principles used in the design and implementation in a computer integrated manufacturing system. Emphasizes team concept and all aspects of a computer integrated manufacturing to include the following: Robotics, Conveyor Control, Machining Center Integration Quality Control, Statistical Quality Control, and Computer Integrated Manufacturing (CIM) software. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

IND 297
Cooperative Education
(1-5 credits)
Supervises in on-the-job training for pay in approved business, industrial and service firms, coordinated by the college’s cooperative education office. Is applicable to all occupational-technical curricula at the discretion of the college. Credit/ work ratio not to exceed 1:5 hours. May be repeated for credit. Variable hours.
Information Technology

Database Processing

**ITD 110**
**Web Page Design I**
(3 credits)
Stresses a working knowledge of web site designs, construction, and management using HTML or XHTML. Includes headings, lists, links, images, image maps, tables, forms, and frames. Co-require or prerequisite: ITE 130. Lecture: 3 hours per week.

**ITD 130**
**Database Fundamentals**
(3 credits)
Introduces the student to relational database and relational database theory. Includes planning, defining and using a database; table design, linking, and normalization; types of databases, database description and definition. Prerequisite: ITE 115. Lecture: 3 hours per week.

**ITD 132**
**Structured Query Language**
(3 credits)
Incorporates a working introduction to commands, functions and operators used in SQL for extracting data from standard databases. Co-require or prerequisite: ITE 215. Lecture: 3 hours per week.

**ITD 136**
**Database Management Software**
(3 credits)
Covers an introduction to relational database theory and how to administer and query databases using multiple commercial database systems. Lecture: 3 hours per week.

**ITD 210**
**Web Page Design II**
(3 credits)
Incorporates advanced techniques in web site planning, design, usability, accessibility, advanced site management, and maintenance utilizing web editor software(s). Prerequisite: ITD 110. Lecture: 3 hours per week.

Information Technology Essentials

**ITE 101**
**Introduction to Microcomputers**
(1 credit)
Examines concepts and terminology related to microcomputers and introduces specific uses of microcomputers. Lecture: 1 hour per week.

**ITE 115**
**Introduction to Computer Applications and Concepts**
(3 credits)
Covers computer concepts and internet skills and use a software suite which includes word processing, spreadsheet, database, and presentation software to demonstrate skills required for computer literacy. Recommended prerequisite keyboarding skills. Lecture: 3 hours per week.

**ITE 119**
**Information Literacy**
(3 credits)
Presents the information literacy core competencies focusing on the use of information technology skills. Skills and knowledge will be developed in database searching, computer applications, information security and privacy, and intellectual property issues. Lecture: 3 hours per week.

**ITE 127**
**Microcomputer Software: Beginning Windows**
(1 credit)
Imparts first-time users with sufficient information to make practical use of the Windows software package. Presents the basics of the features and applications included in the Windows operating system package. Lecture: 1 hour per week.

**ITE 130**
**Introduction to Internet Services**
(3 credits)
Provides students with a working knowledge of Internet terminology and services including e-mail, WWW browsing, search engines, ftp, file compression, and other services using a variety of software packages. Provides instruction for basic web page construction. Lecture: 3 hours per week.

**ITE 131**
**Survey of Internet Services**
(1 credit)
Introduces students to basic internet terminology and services including e-mail, WWW browsing, search engines, ftp telnet, and other services. Lecture: 1 hour per week.

**ITE 140**
**Spreadsheet Software**
(3 credits)
Covers the use of spreadsheet software to create spreadsheets with formatted cells and cell ranges, control pages, multiple sheets, charts, and macros. Topics include type and edit text in a cell, enter data on multiple worksheets, work with formulas and functions, create charts, pivot tables, and styles, insert headers and footers, and filter data. Co-require or prerequisite: ITE 115. Lecture: 3 hours per week.
ITE 141  
**Microcomputer Software: Spreadsheets**  
(1 credit)  
Provides first-time users with sufficient information to make practical use of spreadsheet software using the basic of building spreadsheets. Lecture: 1 hour per week.

ITE 150  
**Desktop Database Software**  
(3 credits)  
Incorporates instruction in planning, defining, and using a database; performing queries; producing reports; working with multiple files; and concepts of database programming. Includes database concepts, principles of table design and table relationships, entering data, creating and using forms, using data from different sources, filtering, creating mailing labels. Co-requisite or prerequisite: ITE 115. Lecture: 3 hours per week.

ITE 151  
**Microcomputer Software: Database Management**  
(1 credit)  
Presents first-time users with sufficient information to make practical use of database management software using the basics of building databases. Covers specific business applications. Lecture: 1 hour per week.

ITE 200  
**Technology for Teachers (TSIP)**  
(3 credits)  
Provides K – 12 classroom teachers with the knowledge and skills needed to fulfill the Commonwealth of Virginia’s Technology Standards for Instructional Personnel. Students will finish the course with a solid understanding of educational technology, including how to use computers, now to access information on the World Wide Web, and how to integrate computers and educational technology into classroom curriculum. Students will learn how to base technology integration decisions on contemporary learning theories. Lecture: 1 hour per week.

ITE 215  
**Advanced Computer Applications and Integration**  
(3 credits)  
Incorporates advanced computer concepts including the integration of a software suite. Prerequisite: ITE 115. Lecture: 3 hours per week.

ITE 221  
**PC Hardware and OS Architecture**  
(3 credits)  
Covers instruction about processors, internal functions, peripheral devices, computer organization, memory management, architecture, instruction format, and basic OS architecture. Prerequisite: ITE 115. Lecture: 3 hours per week.

---

### Information Technology Networking

**ITN 101**  
**Introduction to Network Concepts**  
(3 credits)  
Provides instruction in networking media, physical and logical topologies, common networking standards and popular networking protocols. Emphasizes the TCP/IP protocol suite and related IP addressing schemes, including CIDR. Includes selected topics in network implementation, support and LAN/WAN connectivity. Lecture: 3 hours per week.

**ITN 111**  
**Server Administration**  
(3 credits)  
Covers basic instruction in various network protocols, name resolution services, remote access, security, and print installation, configuration, administration, monitoring, and troubleshooting of Server Administration software (Specify Version) in an Active Directory domain environment. Co-requisite or prerequisite: ITN 101. Lecture: 3 hours per week.

**ITN 154**  
**Networking Fundamentals – Cisco**  
(4 credits)  
Provides introduction to networking using the OSI reference model. Includes data encapsulation, TCP/IP suite, routing, IP addressing, and structured cabling design and implementation. Co-requisite or prerequisite: ITN 101. Lecture: 4 hours per week.

**ITN 154L**  
**Networking Fundamentals - CISCO Laboratory**  
(1 credit)  
Provides problem solving experience to supplement instruction in Networking Fundamentals - Cisco. Corequisite: ITN 154. Laboratory: 2 hours per week.

**ITN 155**  
**Switching, Wireless, and WAN Technologies (ICND2) - Cisco**  
(3 credits)  
Provides the skills and knowledge to install, operate, and troubleshoot a small-to-medium sized branch office enterprise network, including configuring several switches and routers, configuring wireless devices, configuring VLANs, connecting to a WAN, and implementing network security. Prerequisite ITN 154. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.
ITN 156  
**Basic Switching and Routing – Cisco**  
(3 credits)  
Centers instruction in LAN segmentation using bridges, routers, and switches. Includes fast Ethernet, access lists, routing protocols, spanning tree protocol, virtual LANS and network management. Prerequisite: ITN 155. Lecture: 3 hours per week.

ITN 157  
**WAN Technologies – Cisco**  
(3 credits)  
Concentrates on an introduction to Wide Area Networking (WANs). Includes WAN design, LAPB, Frame Relay, ISDN, HDLC, and PPP. Prerequisite: ITN 156. Lecture: 3 hours per week.

ITN 171  
**Unix 1**  
(3 credits)  
Provides an introduction to UNIX operating systems. Teaches login procedures, file creation, UNIX file structure, input/output control, and the UNIX shell. Co-requisite or prerequisite: ITN 101. Lecture: 3 hours per week.

ITN 245  
**Network Troubleshooting**  
(3 credits)  
Focuses on servicing and maintaining local area networks (LANS). Teaches network installation, network troubleshooting, installation of file servers and workstations, configuring of network boards and cables, and diagnosing common network problems. Prerequisite: ITN 101. Lecture: 3 hours per week.

ITN 260  
**Network Security Basics**  
(3 credits)  
Provides instruction in the basics of network security in depth. Includes security objectives, security architecture, security models and security layers; risk management, network security policy, and security training. Includes the give security keys, confidentiality integrity, availability, accountability and auditability. Prerequisite: ITN 101. Lecture: 3 hours per week.

ITN 261  
**Network Attacks, Computer Crime and Hacking**  
(3 credits)  
Encompasses in-depth exploration of various methods for attacking and defending a network. Explores network security concepts from the viewpoint hackers and their attack methodologies. Includes topics about hackers, attacks, Intrusion Detection Systems (IDS) malicious code, computer crime and industrial espionage. Lecture: 3 hours per week.

ITN 262  
**Network Communication, Security and Authentication**  
(3 credits)  
Covers an in-depth exploration of various communication protocols with a concentration on TCP/IP. Explores communication protocols from the point of view of the hacker in order to highlight protocol weaknesses. Includes Internet architecture, routing, addressing, topology, fragmentation and protocol analysis, and the use of various utilities to explore TCP/IP. Lecture: 3 hours per week.

ITN 263  
**Internet/Intranet Firewalls and E-Commerce Security**  
(3 credits)  
Gives an in-depth exploration of firewalls, Web security, and e-commerce security. Explores firewall concepts, types, topology and the firewall’s relationship to the TCP/IP protocol. Includes client/server architecture, the Web server, HTML and HTTP in relation to Web Security, and digital certification, D.509, and public key infrastructure (PKI). Lecture: 3-4 hours per week.

ITN 266  
**Network Security Layers**  
(3 credits)  
Provides an in-depth exploration of various security layers needed to protect the network. Explores Network Security from the viewpoint of the environment in which the network operates and the necessity to secure that environment to lower the security risk to the network. Includes physical security, personnel security, operating system security, software security and database security. Lecture: 3 hours per week.

ITN 267  
**Legal Topics in Network Security**  
(3 credits)  
Conveys an in-depth exploration of the civil and common law issues that apply to network security. Explores statutes, jurisdictional, and constitutional issues related to computer crimes and privacy. Includes rules of evidence, seizure and evidence handling, court presentation and computer privacy in the digital age. Lecture: 3 hours per week.

**Information Technology Programming**

ITP 100  
**Software Design**  
(3 credits)  
Introduces principles and practices of software development. Includes instruction in critical thinking, problem-solving skills, and essential programming logic in structured and object-oriented design using contemporary tools. Co-requisite or prerequisite: ITE 115. Lecture: 3 hours per week.
ITP 110
Visual Basic Programming I
(3 credits)
Involves instruction in fundamentals of event-driven programming using Visual Basic. Emphasizes program construction, algorithm development, coding, debugging, and documentation of graphical user interface applications. Co-requisite or prerequisite: ITP 100. Lecture: 3 hours per week.

ITP 120
Java Programming I
(3 credits)
Entails instruction in fundamentals of object-oriented programming using Java. Emphasizes program construction, algorithm development, coding, debugging, and documentation of console and graphical user interface applications. Co-requisite or prerequisite: ITP 100. Lecture: 3 hours per week.

ITP 160
Introduction to Game Design & Development
(3 credits)
Introduces object-oriented game design and development. Provides overview of the electronic game design and development process and underlines the historical context, content creation strategies, game careers, and future trends in the industry. Utilizes a game language environment to introduce game design, object-oriented paradigms, software design, software development and product testing. Teaches skills of writing a game design document and creating a game with several levels and objects. Integrate 2D animations, 3D models, sound effects, and background music as well as graphic backgrounds. Prerequisite: ITE115. Lecture: 3 hours per week.

ITP 210
Visual Basic Programming II
(3 credits)
Encompasses instruction in the application of advanced event-driven techniques to application development. Emphasizes database connectivity and advanced controls using Visual Basic. Prerequisite: ITP 110. Lecture: 3 hours per week.

ITP 220
Java Programming II
(3 credits)
Imparts instruction in application of advanced object-oriented techniques to application development using Java. Emphasizes database connectivity, inner classes, collection classes, networking, and threads. Prerequisite: ITP 120. Lecture: 3 hours per week.

ITP 251
Systems Analysis and Design
(3 credits)
Focuses on application of information technologies (IT) to system life cycle methodology, systems analysis, systems design, and system implementation practices. Covers methodologies related to identification of information requirements, feasibility in the areas of economic, technical and social requirements, and related issues are included in course content. Software applications may be used to enhance student skills. Prerequisite: ITP 100. Lecture: 3 hours per week.

Japanese

JPN 101
Beginning Japanese I
(5 credits)
Develops the understanding, speaking, reading, and writing of Japanese, and emphasizes the structure of the language. Part I of II. Lecture: 5 hours per week. May include one additional hour of oral practice per week.

JPN 102
Beginning Japanese II
(5 credits)
Continues the development of the skills of understanding, speaking, reading, and writing of Japanese, and emphasizes the structure of the language. Part II of II. Prerequisite: JPN 101. Lecture: 5 hours per week. May include one additional hour of oral practice per week.

JPN 201
Intermediate Japanese I
(4 credits)
Continues the development of the skills of understanding, speaking, reading, and writing of Japanese. Classes conducted in Japanese. Prerequisite: JPN 102. Part I of II. Lecture: 4 hours per week. May include one additional hour of oral practice per week.

JPN 202
Intermediate Japanese II
(4 credits)
Continues the development of the skills of understanding, speaking, reading, and writing of Japanese. Classes conducted in Japanese. Prerequisite: JPN 102. Part II of II. Lecture: 4 hours per week. May include one additional hour of oral practice per week.
Legal Administration

LGL 110
Introduction to Law and the Legal Assistant
(3 credits)
Introduces various areas of law in which a legal assistant may be employed. Includes study of the court system (Virginia and federal) as well as a brief overview of criminal law, torts, domestic relations, evidence, ethics, the role of the legal assistant, and other areas of interest. Lecture: 3 hours per week.

LGL 115
Real Estate Law for Legal Assistants
(3 credits)
Studies law of real property and gives in-depth survey of the more common types of real estate transactions and conveyances such as deeds, contracts, leases, and deeds of trust. Focuses on drafting these various instruments and studies the system of recording and search of public documents. Prerequisite: LGL 110. Lecture: 3 hours per week.

LGL 117
Family Law
(3 credits)
Studies elements of a valid marriage, grounds for divorce and annulment, separation, defenses, custody, support, adoptions, and applicable tax consequences. Includes property settlement, pre- and ante-nuptial agreements, pleadings, and rules of procedure. May include specific federal and Virginia consumer laws. Lecture: 3 hours per week.

LGL 125
Legal Research
(3 credits)
Provides an understanding of various components of a law library, and emphasizes research skills through the use of digests, encyclopedias, reporter systems, codes, Shepards’ Citations, ALR, and other research tools. May include overview of computer applications and writing projects. Co-requisite: LGL 110. Lecture: 3 hours per week.

LGL 126
Legal Writing
(3 credits)
Studies proper preparation of various legal documents, including legal memoranda, letters, and pleadings. Involves practical applications. May include case and appellate briefs. Prerequisite: ENG 111 or permission of instructor. Prerequisite: LGL 125. Lecture: 3 hours per week.

LGL 130
Law Office Administration and Management
(3 credits)
Introduces management principles and systems applicable to law firms, including record keeping, disbursements, escrow accounts, billing, and purchasing. May include accounting methods and software packages applicable to law firms. Lecture: 3 hours per week.

LGL 215
Torts
(3 credits)
Studies fundamental principles of the law of torts. May include preparation and use of pleadings and other documents involved in the trial of a civil action. Emphasizes personal injury, products liability, and malpractice cases. Lecture: 3 hours per week.

LGL 218
Criminal Law
(3 credits)
Focuses on major crimes, including their classification, elements of proof, intent, conspiracy, responsibility, parties, and defenses. Emphasizes Virginia law. May include general principles of applicable constitutional law and criminal procedure. Lecture: 3 hours per week.

LGL 235
Legal Aspects of Business Organizations
(3 credits)
Studies fundamental principles of agency law and the formation of business organizations. Includes sole proprietorships, partnerships, corporation, limited liability companies, and other business entities. Reviews preparation of the documents necessary for the organization and operation of businesses. Lecture: 3 hours per week.

LGL 238
Bankruptcy
(3 credits)
Provides a practical understanding of non-bankruptcy alternatives and the laws of bankruptcy including Chapters 7, 11, 12 and 13 of the Bankruptcy Code. Emphasis will be placed on preparing petitions, schedules, statements, and other forms. Lecture: 3 hours per week.

LGL 250
Immigration Law
(3 credits)
Provides an introduction to immigration law and policy, giving an overview of the United States legal system that regulates the admission, exclusion, removal, and naturalization of immigrants. Includes issues concerning refugees, asylum seekers, illegal immigrants, and undocumented aliens. Lecture: 3 hours per week.

Machine Technology

MAC 121 – 122
Computer Numerical Control I – II
(3 credits each)
Focuses on numerical control techniques in metal forming and machine processes. Includes theory and practice in lathe and milling machine computer numerical control program writing, setup and operation. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.
MAC 123
Computer Numerical Control III
(3 credits)
Focuses on numerical control techniques in metal forming and machine processes. Includes theory and practice in lathe and milling machine computer numerical control program writing, setup and operation. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

MAC 130
Introduction to Electric Discharge Machining (EDM)
(2 credits)
Introduces the equipment, processes, and components of electric discharge machining. Includes basic operation and programming for computer numerical control (CNC) electric discharge machining (EDM). Prerequisite(s): Basic understanding of computer numerical control (CNC). Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

MAC 131
Machine Lab I
(2 credits)
Teaches fundamental machine shop operations, bench work, layout, measuring tools, and safety. Lecture: 1 hour. Laboratory: 3 hours. Total: 4 hours per week.

MAC 134
CMM Operation and Programming
2 credits
Focuses on inspection using a Coordinate Measuring Machine. Includes hands-on demonstration of CMM setup, initialization and operation. Covers the essential aspects of the software and CMM operation, using a sample part for hands-on practice. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

MAC 150
Introduction to Computer-Aided Manufacturing
(3 credits)
Introduces computer-aided manufacturing (CAM) with emphasis on programming of numerical control machinery. Teaches program writing procedures using proper language and logic and a CAM programming system to produce numerical control code for machines. Teaches basic computer usage, 2 1/2D and 3D CAD-CAM integration and code-to-machine transfer. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

MAC 161 – 162
Machine Shop Practices I – II
(3 credits each)
Introduces safety procedures, bench work, hand tools, precision measuring instruments, drill presses, cut-off saws, engine lathes, manual surface grinders and milling machines. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

MAC 163 – 164
Machine Shop Practices III – IV
(3 credits each)
Offers practice in the operation of the drill press, engine lathe, vertical milling machine, horizontal milling machine and the surface grinder. Introduces practical heat treatment of directly hardenable steels commonly used in machine shops. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

MAC 171 – 172
Machine Tool Operations I – II
(3 credits each)
Uses basic fractional and decimal measuring tools and hand tools. Covers linear, angular and radial layout and precision measuring. Includes setup and operations of hand saws, drill presses, the engine lathe and the vertical and horizontal milling machines. Requires solutions of related problems and preparation of weekly laboratory reports. Laboratory: 6 hours per week.

MAC 181
Machine Blueprint Reading I
(3 credits)
Introduces reading and interpreting blueprints and working drawings. Applies visualization of objects, sketching, and machine terminology. Part I of II Lecture: 3 hours per week.

MAC 209
Standards, Measurements and Calculations
(3 credits)
Presents typical mathematical and mechanical problems requiring the use of reference standards such as the Machinery’s Handbook for solution. Presents use of the Coordinate Measuring Machine for solution. Lecture: 3 hours per week.

Marketing

MKT 100
Principles of Marketing
(3 credits)
Presents principles, methods and problems involved in marketing to consumers and organizational buyers. Discusses problems and policies connected with distribution and sale of products, pricing, promotion and buyer motivation. Examines variations of marketing research, legal, social, ethical, e-commerce and international considerations in marketing. Lecture: 3 hours per week.
MKT 220
Principles of Advertising
(3 credits)
Emphasizes the role of advertising in the marketing of goods, services, and ideas. Discusses the different uses of advertising; types of media; how advertising is created; agency functions; and legal, social, and economic aspects of the industry. Introduces advertising display, copy and art work preparation, printing and selection of media. Lecture: 3 hours per week.

Mathematics

MTH 103 – 104
Applied Technical Mathematics I – II
(3 credits each)
Presents a review of arithmetical elements of algebra, geometry and trigonometry. Directs applications to specialized areas. Prerequisites: Modules 1–3 or SAT of 520. MTH 104 Prerequisite: MTH 103. Lecture: 3 hours per week.

MTH 120
Introduction to Mathematics
(3 credits)
Introduces number systems, logic, basic algebra and descriptive statistics (intended for occupational/technical programs). Prerequisites: Modules 1–3, MTH 2 or SAT of 520. Lecture: 3 hours per week.

MTH 157
Elementary Statistics
(3 credits)
Presents elementary statistical methods and concepts including descriptive statistics, estimation, hypothesis testing, linear regression, and categorical data analysis. (Credit will not be awarded for both MTH 157 and MTH 240 or MTH 241.) Prerequisites: Competency in Math Essentials MTE 1–5 as demonstrated through the placement and diagnostic tests, or by satisfactorily completing the required MTE units or equivalent. Lecture: 3 hours per week.

MTH 158
College Algebra
(3 credits)
Covers the structure of complex number systems, polynomials, rational expressions, graphing, systems of equations and inequalities and functions, quadratic and rational equations and inequalities. Prerequisites: Modules 1–5, MTH 3 or SAT of 520. Lecture: 3 hours per week.

MTH 163
Precalculus I
(3 credits)
Presents college algebra; matrices; and algebraic, exponential and logarithmic functions. Prerequisites: Modules 1-9, MTH 4, or SAT of 520. (Credit will not be awarded for both MTH 163 and MTH 166.) Lecture: 3 hours per week.

MTH 164
Precalculus II
(3 credits)
Presents trigonometry, analytic geometry and sequences in series. Prerequisite: MTH 163. (Credit will not be awarded for both MTH 164 and MTH 164.) Lecture: 3 hours per week.

MTH 166
Precalculus with Trigonometry
(5 credits)
Presents college algebra, analytic geometry, trigonometry, and algebraic exponential, and logarithmic functions. Prerequisite: Modules 1-9, MTH 4, or SAT of 520. Lecture: 5 hours per week.

MTH 170
Foundations in Contemporary Mathematics
(3 credits)
Covers topics in the mathematics of social choice, management sciences, statistics and growth. Uses physical demonstrations and modeling techniques to teach the power and utility of mathematics. Prerequisite: Modules 1–5, MTH 3 or SAT of 520. Lecture: 3 hours per week.

MTH 173
Calculus with Analytic Geometry I
(5 credits)
Presents analytic geometry and the calculus of algebraic and transcendental functions including the study of limits, derivatives, differentials, and introduction to integration along with their applications. Designed for mathematical, physical and engineering science programs. Prerequisites: MTH 164 or MTH 166. (Credit will not be awarded for more than one of MTH 173, MTH 175, or MTH 273.) Lecture: 5 hours per week.

MTH 174
Calculus with Analytic Geometry II
(5 credits)
Continues the study of analytic geometry and the calculus of algebraic and transcendental functions including rectangular, polar, and parametric graphing, indefinite and definite integrals, methods of integration, and power series along with applications. Designed for mathematical, physical, and engineering science programs. Prerequisite: MTH 173 or equivalent. (Credit will not be awarded for more than one of MTH 174, MTH 176 or MTH 274.) Lecture: 5 hours per week.

MTH 240
Statistics
(3 credits)
Presents an overview of statistics, including descriptive statistics, elementary probability, probability distributions, estimation, hypothesis testing, and correlation and regression. Prerequisites: MTH 158, MTH 163 or MTH 166. (Credit will not be awarded for both MTH 240 and MTH 241.) Lecture: 3 hours per week.
MTH 270
Applied Calculus
(3 credits)
Introduces limits, continuity, differentiation and integration of algebraic and transcendental functions, techniques of integration, and partial differentiation. Prerequisite: MTH 163 or MTH 166. (Credit will not be awarded for both MTH 270 and MTH 271.) Lecture: 3 hours per week.

MTH 277
Vector Calculus
(4 credits)
Presents vector valued functions, partial derivatives, multiple integrals, and topics from the calculus vectors. Designed for mathematical, physical, and engineering science programs. Prerequisite: MTH 174 or equivalent. Lecture: 4 hours per week.

MTH 279
Ordinary Differential Equations
(4 credits)
Introduces ordinary differential equations. Includes first order differential equations, second and higher order ordinary differential equations with application. Designed for mathematical, physical, and engineering science programs. Prerequisite: MTH 174 or equivalent. Lecture: 4 hours per week.

Math Essentials

MTE 1
Operations with Positive Fractions
(1 credit)
Includes operations and problem-solving with proper fractions, improper fractions, and mixed numbers without the use of a calculator. Emphasizes applications and includes U. S. customary units of measure. Credit is not applicable toward graduation. Lecture: 1 hour per week. Prerequisite: Qualifying placement score.

MTE 2
Operations with Positive Decimals and Percents
(1 credit)
Includes operations and problem-solving with positive decimals and percents. Emphasizes applications and includes U. S. customary and metric units of measure. Credit is not applicable toward graduation. Prerequisite: MTE 1 or qualifying placement score. Lecture: 1 hour per week.

MTE 3
Algebra Basics
(1 credit)
Includes basic operations with algebraic expressions and solving simple algebraic equations using signed numbers with emphasis on applications. Credit is not applicable toward graduation. Lecture: 1 hour per week. Prerequisite: MTE 1-2 or qualifying placement score.

MTE 4
First Degree Equations and Inequalities in One Variable
(1 credit)
Includes solving first-degree equations and inequalities containing one variable, and using them to solve application problems. Emphasizes applications and problem solving. Credit is not applicable toward graduation. Lecture: 1 hour per week. Prerequisite: MTE1-3 or qualifying placement score.

MTE 5
Linear Equations, Inequalities and Systems of Linear Equations in Two Variables
(1 credit)
Includes finding the equation of a line, graphing linear equations and inequalities in two variables and solving systems of two linear equations. Emphasizes writing and graphing equations using the slope of the line and points on the line, and applications. Credit is not applicable toward graduation. Lecture: 1 hour per week. Prerequisite: MTE 1-4 or qualifying placement score.

MTE 6
Exponents, Factoring and Polynomial Equations
(1 credit)
The student will learn to perform operations on exponential expressions and polynomials. Students will also learn techniques to factor polynomials and use these techniques to solve polynomial equations. Emphasis should be on learning all the different factoring methods, and solving application problems using polynomial equations. Credit is not applicable toward graduation. Lecture: 1 hour per week. Prerequisite: MTE1-5 or qualifying placement score.

MTE 7
Rational Expressions and Equations
(1 credit)
Includes simplifying rational algebraic expressions, solving rational algebraic equations and solving applications that use rational algebraic equations. Credit is not applicable toward graduation. Lecture: 1 hour per week. Prerequisite: MTE 1-6 or qualifying placement score.

MTE 8
Rational Exponents and Radicals
(1 credit)
Includes simplifying radical expressions, using rational exponents, solving radical equations and solving applications using radical equations. Credit is not applicable toward graduation. Lecture: 1 hour per week. Prerequisite: MTE 1-7 or qualifying placement score.
MTE 9  
**Functions, Quadratic Equations and Parabolas**  
(1 credit)  
Includes an introduction to functions in ordered pair, graph, and equation form. Also introduces quadratic functions, their properties and their graphs. Credit is not applicable toward graduation. Lecture: 1 hour per week. Prerequisite: MTE1-8 or qualifying placement score.

### Mechanical Engineering Technology

**MEC 101 – 102**  
**Introduction to Engineering Technology I – II**  
(2 credits each)  
Introduces engineering technology. Provides historical background. Covers such topics as professional ethics; problem-solving techniques involving forces, structures, materials, fluids, energy, and electricity and U.S. Customary and S.I. units, and unit conversions. Lecture: 2 hours per week.

**MEC 113**  
**Materials and Processes of Industry**  
(3 credits)  
Studies engineering materials and accompanying industrial manufacturing processes. Investigates nature of materials structure and properties from a design standpoint. Analyzes both the effects of various processes on materials and the processes themselves. Includes machining, casting, forming, molding, hot/cold working, machining and welding. Addresses quality assurance and inspection procedures. Lecture: 3 hours per week.

**MEC 131**  
**Mechanics I – Statics for Engineering Technology**  
(3 credits)  
Teaches Newton’s laws, resultants and equilibrium of force systems, trusses and frames, determination of centroids, and distributed loads and moments of inertia. Introduces dry friction and force systems in space. Lecture: 3 hours per week.

**MEC 132**  
**Mechanics II – Strength of Mat. for Eng. Tech**  
(3 credits)  
Teaches the concepts of stress and strain. Provides an analysis of stresses and deformations in loaded members, connectors, shafts, beams, columns, and combined stress. Lecture: 3 hours per week.

**MEC 140**  
**Introduction to Mechatronics**  
(3 credits)  
Presents foundational concepts in mechatronics including analog and digital electronics, sensors, actuators, microprocessors, and microprocessor interfacing to electromechanical systems. Surveys components and measurement equipment used in the design, installation, and repair of mechatronic equipment and circuits. Prerequisite: divisional approval. Lecture: 1 hour. Laboratory: 3 hours. Total: 4 hours per week.

**MEC 154**  
**Mechanical Maintenance I**  
(3 credits)  
Provides an overview of basic maintenance techniques and processes for industrial mechanics and technicians who are installing and maintaining industrial mechanical and power transmission components. Lecture: 2 hours. Laboratory: 1 hour. Total: 3 hours per week.

**MEC 211 – 212**  
**Machine Design I – II**  
(4 credits each)  
Introduces analytical design of bearings, clutches, coupling, brakes, springs, gearing systems and power shafting. Emphasizes methods of construction, machine parts and specifications of materials, and manufacturing processes. MEC 212 prerequisite: MEC 211. Lecture: 3 hours. Laboratory: 2 hours. Total: 5 hours per week.

**MEC 226**  
**Practical Metallurgy**  
(3 credits)  
Studies metals and their structure. Focuses on effects of hardening, tempering, and annealing upon the structure and physical properties of ferrous and non-ferrous metals. Covers the equipment and processes in heat treating. Lecture: 3 per week.

**MEC 254**  
**Mechanical Maintenance II**  
(3 credits)  
Covers advanced maintenance techniques and processes for industrial mechanics and technicians who are installing and maintaining industrial mechanical and power transmission components. Lecture: 2 hours. Laboratory: 2 hours. Total 4 hours per week.

**MEC 266**  
**Applications of Fluid Mechanics**  
(3 credits)  
Teaches theory of hydraulic and pneumatic circuits including motors, controls, actuators, valves, plumbing, accumulators, reservoirs, pumps, compressors, and filters. Lecture: 3 hours per week.
MEC 270
Computations for Engineering Technology
(3 credits)
Provides the use of spreadsheets and Matlab or equivalent to solve a variety of problems in introductory engineering analysis, such as graphing data, unit conversions, simple statistical analysis, sorting, searching and analyzing data, curve fitting, interpolation, solving algebraic equations, logical decisions, evaluating integrals, comparing economic alternatives, and finding optimum solutions. The acquisition and processing of data as well as macro programming in Basic are also covered. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

Mental Health

MEN 101
Mental Health Skill Training I
(3 credits)
Develops skills necessary to function as a mental health worker, with emphasis on guided practice in counseling skills as well as improved self-awareness. Includes training in problem-solving, goal-setting, and implementation of appropriate strategies and evaluation techniques relating to interaction involving a variety of client needs. Lecture: 3 hours per week.

MEN 102
Mental Health Skill Training II
(3 credits)
Develops skills necessary to function as a mental health worker, with emphasis on guided practice in counseling skills as well as improved self-awareness. Includes training in problem-solving, goal-setting, and implementation of appropriate strategies and evaluation techniques relating to interaction involving a variety of client needs. Lecture: 3 hours per week.

MEN 110
Introduction to Abnormal Psychology
(3 credits)
Studies symptoms, causes and treatment of mental deficiency, neurosis, psychosis and character disorders, with specific relationship to work of the mental health technologists. Lecture: 3 hours per week.

MEN 121 – 122
Intellectual Disabilities I – II
(3 credits each)
Explores current problems and social, cultural and legal issues involved in therapeutic interventions for understanding and programs relating to the mentally retarded. Prerequisite: HMS 100. Lecture: 3 hours per week.

MEN 190
Coordinated Practice
(3 credits)
Supervises on-the-job training in selected business, industrial or service firms coordinated by the college.

MEN 196
On-Site Training
(3 credits)
Specializes in career orientation and training program without pay in selected businesses and industry, supervised and coordinated by the college.

MEN 198
Seminar and Project
(1 – 5 credits)
Requires completion of a project or research report related to the student’s occupational objectives and a study of approaches to the selection and pursuit of career opportunities in the field. May be repeated for credit. Variable hours.

MEN 225
Counseling Therapy
(3 credits)
Studies various models of counseling theories and appropriate application of counseling techniques in the helping profession. Lecture: 3 hours per week.

MEN 290
Coordinated Practice
(3 credits)
Supervises on-the-job training in selected business, industrial or service firms coordinated by the college.

MEN 296
On-Site Training
(3 credits)
Specializes in career orientation and training program without pay in selected businesses and industry, supervised and coordinated by the college.

Music

MUS 101 – 102
Basic Musicianship I – II
(3 credits)
Provides exercises leading to knowledge and skill in the rudiments of music. Includes rhythmic notation as well as scales, keys, and intervals along with exercises in sight reading and ear training. Lecture: 3 hours per week.

MUS 111 – 112
Music Theory I – II
(4 credits each)
Discusses elements of musical construction of scales, intervals, triads and chord progressions. Develops ability to sing at sight and write from dictation. Introduces the analysis of the Bach chorale style. Expands facility with harmonic dictation and enables the student to use these techniques at the keyboard. Lecture: 3 hours. Laboratory: 2 hours. Total: 5 hours per week.
MUS 121 – 122  
**Music Appreciation I – II**  
(3 credits each)  
Increases the variety and depth of the student’s interest, knowledge and involvement, in music and related cultural activities. Acquaints the student with traditional and twentieth-century music literature, emphasizing the relationship music has as an art form with man and society. Increases the student’s awareness of the composers and performers of all eras through listening and concert experiences. Lecture: 3 hours per week.

MUS 125  
**American Music**  
(3 credits)  
Presents the development of music in America from early colonists to the present, in light of philosophical, political, geographical and sociological developments. Lecture: 3 hours per week.

MUS 131 – 132  
**Class Voice I – II**  
(2 credits each)  
Introduces the many aspects of singing from the physical act through the aesthetic experience. The course is designed for the beginning singer who desires vocal improvement, and for the voice major as an addition to and extension of skills and knowledge necessary for artistic development. Introduces appropriate repertoire. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

MUS 137  
**Chorus Ensemble**  
(2 credits)  
Ensemble consists of performance from the standard repertoires, including study of ensemble techniques and interpretation. Divisional approval required. May be repeated for credit. Laboratory: 4 hours per week.

MUS 141 - 142  
**Class Piano I – II**  
(2 credits each)  
Offers the beginning piano student activities in learning musical notation, in accomplishing sight-reading skills, and in mastering techniques of keyboard playing. Presents appropriate literature. Open to all students and may be used to fulfill applied minor instrument requirement for music major. MUS 142 prerequisite: MUS 141. Lecture: 1 hour. Laboratory 2 hours. Total: 3 hours per week.

MUS 163  
**Guitar Theory and Practice I**  
(3 credits)  
Studies the fundamentals of sound production, music theory, and harmony as they apply to guitar. Builds proficiency in both the techniques of playing the guitar and in the application of music fundamentals to these techniques. Presents different types of guitars and related instruments. Emphasizes music as entertainment and as a communication skill. Part I of II. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

MUS 164  
**Guitar Theory and Practice II**  
(3 credits)  
Studies the fundamentals of sound production, music theory, and harmony as they apply to guitar. Builds proficiency in both the techniques of playing the guitar and in the application of music fundamentals to these techniques. Presents different types of guitars and related instruments. Emphasizes music as entertainment and as a communication skill. Part II of II. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

MUS 174  
**Afro-Caribbean Drumming**  
(2 credits)  
Focuses on the drumming traditions of West Africa, the Caribbean Islands, and South America beginning with their roots and continuing through the development of Jazz and African American spirituals. Includes hand drumming, drum materials and construction, and the different purposes of drumming. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

MUS 221  
**History of Music I**  
(3 credits)  
Presents the chronology of musical styles from antiquity to the present time. Relates the historical development of music to parallel movements in art, drama, and literature. Develops techniques for listening analytically and critically to music. Part I of II. Lecture: 3 hours per week.

MUS 222  
**History of Music II**  
(3 credits)  
Presents the chronology of musical styles from antiquity to the present time. Relates the historical development of music to parallel movements in art, drama, and literature. Develops techniques for listening analytically and critically to music. Part II of II. Lecture: 3 hours per week.

MUS 225  
**The History of Jazz**  
(3 credits)  
Studies the underlying elements of jazz, concentrating on its cultural and historical development from earliest stages to the present. No previous knowledge of music is required. Lecture: 3 hours per week.
Natural Science

NAS 125
Meteorology
(4 credits)
Presents a non-technical survey of fundamental meteorology. F 
Focuses on the effects of weather and climate on humans and 
their activities. Serves for endorsement or recertification of 
earth science teachers. Lecture: 3 hours per week. Recitation 
and laboratory: 2 hours per week. Total: 5 hours per week.

Nursing

NUR 111
Nursing I
(7 credits)
Introduces nursing principles including concepts of health 
and wellness and the nursing process. Develops nursing 
skills to meet the biopsychosocial needs of individuals 
across the lifespan. Includes math computational skills, basic 
computer instruction related to the delivery of nursing care, 
communication skills, introduction to nursing, health, the 
health care system, legal aspects of nursing care, diagnostic 
testing, assessment, teaching and learning, asepsis, body 
mechanics and safety, personal care, activity/rest, wound care, 
nutrition, elimination, oxygenation, fluid and electrolytes, pain 
control, medication administration, aging populations and pre/
post operative care. Provides supervised learning experiences. 
Lecture: 4 hours. Laboratory: 9 hours. Total: 13 hours per 
week.

NUR 221
Second Level Nursing Principles and Concepts
(9 credits)
Focuses on nursing care of individuals, families, and/or groups 
with multidimensional needs in a variety of settings. Uses all 
components of the nursing process with increasing degrees 
of skill. Includes math computational skills, basic computer 
instruction related to the delivery of nursing care and nursing 
care related to infectious, immunological, oncological, 
hematological, gastrointestinal, vascular, sensory, genitourinary 
musculoskeletal, regulatory, endocrine, and women’s health 
disorders and pre/intra/post operative care. Provides supervised 
learning experiences in college nursing laboratories and/or 
cooperating agencies. Lecture: 5 hours. Laboratory: 12 hours. 
Total: 17 hours per week.

NUR 223
Second Level Nursing Principles and Concepts III
(9 credits)
Focuses on nursing care of individuals, families, and/or groups 
with multidimensional needs related to medical/surgical 
disorders in a variety of settings. Uses all components of the 
nursing process with increasing degrees of skill. Includes 
math computational skills, basic computer instruction related 
to the delivery of nursing care; nursing care related to organ 
procurement; emergency care; and, cardiac, respiratory, 
endocrine vascular, burn, immunological, neurological, 
hematological disorders. Provides supervised learning 
experiences in college nursing laboratories and/or cooperating 
agencies. Lecture: 4 hours. Laboratory: 15 hours. Total: 19 
hours per week.

NUR 226
Health Assessment
(3 credits)
Introduces the systematic approach to obtaining a health 
history and performing a physical assessment. Lecture: 2 hours. 
Laboratory: 3 hour. Total: 5 hours per week.

NUR 230
Pharmacology
(3 credits)
Introduces general principles of drug action, pharmacology 
of the major drug classes, and specific agents within each class. 
Includes math calculations necessary to adapt dosages to the 
multidimensional needs of individuals across the lifespan. 
Lecture: 3 hours per week.

NUR 245
Maternal/Newborn Nursing
(3 credits)
Develops nursing skills in caring for families in the 
antepartum-, intrapartum-, and post-partum periods. Lecture: 2 
hours. Laboratory: 3 hour. Total: 5 hours per week.

NUR 246
Parent/Child Nursing
(3 credits)
Develops nursing skills in caring for both well and ill children 
in a variety of settings. Emphasizes theories of growth and 
development and the family as a unit. Lecture: 2 hours. 
Laboratory: 3 hour. Total: 5 hours per week.

NUR 247
Psychiatric/Mental Health Nursing
(3 credits)
Develops nursing skills in caring for individuals, families, and/or 
groups with mental health needs. Explores various treatment 
models, diagnostic categories, and rehabilitative measures. 
Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.
NUR 254
Dimensions of Professional Nursing (1 credit)
Explores the role of the professional nurse. Emphasizes nursing organizations, legal and ethical implications, and addresses trends in management and organizational skills. Explores group dynamics, relationships, conflicts, and leadership styles. Lecture: 1 hour per week.

Philosophy

PHI 101
Introduction to Philosophy I (3 credits each)
Introduces a broad spectrum of philosophical problems and perspectives with an emphasis on the systematic questioning of basic assumptions about meaning, knowledge, reality and values. Lecture: 3 hours per week.

PHI 111
Logic I (3 credits)
Introduces inductive and deductive reasoning with an emphasis on common errors and fallacies. Lecture: 3 hours per week.

PHI 112
Logic II (3 credits)
Evaluates deductive arguments utilizing methods of symbolic logic. Lecture: 3 hours per week.

PHI 211
The History of Western Philosophy I (3 credits)
Provides historical survey of representative philosophers from the pre-Socratics to the present. Introduces the student to development of philosophical thought through selected readings of original works and appropriate critical materials. Part I of II. Lecture: 3 hours per week.

PHI 212
The History of Western Philosophy II (3 credits)
Provides historical survey of representative philosophers from the pre-Socratics to the present. Introduces the student to development of philosophical thought through selected readings of original works and appropriate critical materials. Part II of II. Lecture: 3 hours per week.

PHI 220
Ethics (3 credits)
Provides a systematic study of representative ethical systems. Lecture: 3 hours per week.

PHI 226
Social Ethics (3 credits)
Provides a critical examination of moral problems and studies the application of ethical concepts and principles to decision making. Topics may include abortion, capital punishment, euthanasia, man and the state, sexuality, war and peace, and selected issues of personal concern. Lecture: 3 hours per week.

Photography

PHT 101 – 102
Photography I – II (3 credits each)
Teaches principles of photography and fundamental camera techniques. Requires outside shooting and lab work. Lecture: 1 hour. Laboratory: 4 hours. Total: 5 hours per week.

PHT 105
Basic Photography (3 credits)
Studies fundamental techniques of the camera and its expressive possibilities. Lecture: 3 hours. Total: 3 hours per week.

PHT 107
Nature Photography (3 credits)
Teaches fundamentals of 35mm color slide photography of natural objects. Emphasizes selection of equipment and film, compositional theory, and the flash photography formula. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

PHT 110
History of Photography (3 credits)
Surveys important photographers, processes, and historical influences of the 19th and 20th centuries. Lecture: 3 hours per week.

PHT 120
Screenwriting (3 credits)
Focuses on the craft of writing for the screen. Examines film and television screenplay structure. Analyzes dramatic strategies in film and television. Learn and apply correct script form and creatively engage in the various stages of original scriptwriting. Lecture: 3 hours per week.

PHT 135
Electronic Darkroom (3 credits)
Teaches students to create and manipulate digital photographs. Covers masking, color corrections, and merging of illustrations with photographs. Examines the ethical and property-rights issues that are raised in the manipulation of images. Lecture: 1 hour. Laboratory: 4 hours. Total: 5 hours per week.
PHT 150
Film Production I
(3 credits)
Introduces students to the basic techniques and procedures involved in motion picture production. Emphasizes aspects of filmmaking from scripting and preproduction through editing and postproduction. Includes the exploration of professional film crew roles in grip, lighting, production management, directing, sound and editing. Part I of II. This course is cross-listed with ART 160. Credit will not be awarded for both. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

PHT 151
Film Production II
(3 credits)
Reinforces techniques covered in Film Production I emphasizing technical and theoretical aspects of the filmmaking process. Requires student collaboration on film assignments from scripting and preproduction through editing and postproduction, and roles in grip, lighting, production management, directing, sound, and editing. Part II of II. This course is cross-listed with ART 161. Credit will not be awarded for both. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

PHT 164
Introduction to Digital Photography
(3 credits)
Teaches the fundamentals of photography including camera function, composition, and image production as they apply to digital imagery. Lecture: 1 hour. Laboratory: 4 hours. Total: 5 hours per week.

PHT 206
Large Format Photography
(3 credits)
Discusses 4x5 view camera techniques and controls, and sheet film processing. Demonstrates the image-making advantages of large format photography. Prerequisite: PHT 102 or equivalent. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

PHT 216
Wildlife Photography
(3 credits)
An advanced course in the photography of natural objects. Emphasis will be placed on critiquing the student’s photographic work. Offers seminars on specific subject areas such as animals, plants, birds, insects, and wilderness scenes. Prerequisite PHT 117 or divisional permission. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

PHT 221 – 222
Studio Lighting I – II
(3 credits each)
Examines advanced lighting and camera techniques under controlled studio conditions. Includes view camera use, electronic flash, advanced lighting techniques, color temperature and filtration, and lighting ratios. Requires outside shooting. Prerequisite: PHT 102 or equivalent. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

PHT 231
Photojournalism I
(3 credits)
Introduces equipment, techniques, skills, and concepts of photojournalism. Teaches photography for features, spot news, and photo essays. Emphasizes editing, captioning, and layout. May require individual projects. Prerequisite PHT 102 or equivalent. Part I of II. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

PHT 232
Photojournalism II
(3 credits)
Introduces equipment, techniques, skills, and concepts of photojournalism. Teaches photography for features, spot news, and photo essays. Emphasizes editing, captioning, and layout. May require individual projects. Prerequisite PHT 102 or equivalent. Part II of II. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

PHT 247
Alternative Photographic Processes
(3 credits)
Explores manipulated imagery including traditional and non-traditional processes such as non-silver and electronic imaging. Uses enlarged film negatives in order to investigate a variety of methods. Prerequisite PHT 102 or equivalent. Lecture: 1 hour. Laboratory: 4 hours. Total: 5 hours per week.

PHT 264
Digital Photography II
(3 credits)
Teaches theory and practice of digital photography. Emphasizes use of digital cameras in studio and on location. Teaches advanced techniques of image editing. Provides training in digital image transmission from remote locations. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

PHT 274
Digital Film Editing and Post Production
(3 credits)
Introduces students to techniques and procedures involved in digital film editing and post production. Covers aspects of editing to include industry standard software packages. Emphasizes the mechanics and obstacles of working with the moving image in the 21st century including available tools and methods, importance of file types, and how to keep things organized. Lecture: 2 hours. Laboratory 2 hours. Total: 4 hours per week.
Physical Education and Recreation

PED 101
Fundamentals of Physical Activity I
(2 credits each)
Presents principles underlying the components of physical fitness. Utilizes conditioning activities involving cardiovascular strength and endurance, respiratory efficiency, muscular strength and flexibility. May include fitness assessment, nutrition and weight control information and concepts of wellness. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

PED 103
Aerobic Fitness I
(1 credit)
Develops cardiovascular fitness through activities designed to elevate and sustain heart rates appropriate to age and physical condition. Part I of II. Laboratory: 2 hours. Total: 2 hours per week.

PED 109
Yoga
(1 credit)
Focuses on the forms of yoga training emphasizing flexibility. Laboratory: 2 hours. Total: 2 hours per week.

PED 111
Weight Training I
(1 credit)
Focuses on muscular strength and endurance training through individualized workout programs. Teaches appropriate use of weight equipment. Laboratory: 2 hours. Total: 2 hours per week.

PED 116
Lifetime Fitness and Wellness
(2 credits)
Provides a study of fitness and wellness and their relationship to a healthy lifestyle. Defines fitness and wellness, evaluates the student’s level of fitness and wellness, and motivates the student to incorporate physical fitness and wellness into daily living. A personal fitness/wellness plan is required for the 2-credit course. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

PED 117
Fitness Walking
(1 credit)
Teaches content and skills needed to design, implement, and evaluate an individualized program of walking, based upon fitness level. Laboratory: 2 hours per week.

PED 129
Self Defense
(1 credit)
Examines history, techniques and movements associated with self-defense. Introduces the skills and methods of self-defense emphasizing mental and physical discipline. Laboratory: 2 hours per week.

PED 133
Golf I
(1 credit)
Teaches basic skills of golf, rules, etiquette, scoring, terminology, equipment selection and use, and strategy. Part I of II. Laboratory: 2 hours. Total: 2 hours per week.

PED 139
Ice Skating
(1 credit)
Introduces the skills of figure skating with emphasis on form. Includes equipment selection and safety. Laboratory: 2 hours. Total: 2 hours per week.

PED 149
Cardio Sculpt I
(1 credit)
Combines strength training and cardiovascular workouts that strengthen the major muscle groups as well as developing endurance. Utilizes the use of weights, balls and bands, fitness equipment or a combination thereof that promote cardiovascular endurance and develops muscle strength. Benefits all levels of participation. Laboratory: 2 hours per week.

PED 150
Soccer
(1 credit)
Emphasizes soccer skills and techniques, strategies, rules, equipment, and physical conditioning. Laboratory: 2 hours per week.

PED 154
Volleyball
(1 credit)
Introduces skills, techniques, strategies, rules, and scoring. Laboratory: 2 hours. Total: 2 hours per week.

PED 171
Ballroom Dance I
(1 credit each)
Presents the basic step patterns, rhythmic patterns, and positions in ballroom dance. Includes techniques based upon traditional steps with basic choreographic patterns. Laboratory: 2 hours per week.
PED 188
Freshwater Fishing
(1 credit)
Teaches freshwater fishing techniques including spinning, bait casting and fly casting. Presents selection and care of equipment, fish habits, conservation, and safety. Laboratory: 2 hours per week.

PED 206
Sports Appreciation
(2 credits)
Focuses on the history, trends, rules, methods, strategy, and terminology of selected sports activities. Provides student awareness as a spectator and/or participant. Lecture: 2 hours per week.

Physics

PHY 101 – 102
Introduction to Physics I – II
(4 credits)
Surveys general principles of physics. Includes topics such as force and motion, energy, heat, sound, light, electricity and magnetism, and modern physics. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

PHY 150
Elements of Astronomy
(4 credits)
Covers history of astronomy and its recent developments. Stresses the use of astronomical instruments and measuring techniques and includes the study and observation of the solar system, stars, and galaxies. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

PHY 201
General College Physics I
(4 credits)
Teaches fundamental principles of physics. Covers mechanics, thermodynamics, wave phenomena, electricity and magnetism and selected topics in modern physics. Part I of II. Prerequisite: MTH 163 or MTH 173. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

PHY 202
General College Physics II
(4 credits)
Teaches fundamental principles of physics. Covers mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics. Prerequisite: PHY 201. Part II of II. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

PHY 241
University Physics I
(4 credits)
Teaches principles of classical and modern physics. Includes mechanics, wave phenomena, heat, electricity, magnetism, relativity, and nuclear physics. Prerequisite: MTH 173 or divisional approval. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

PHY 242
University Physics II
(4 credits)
Teaches principles of classical and modern physics. Includes mechanics, wave phenomena, heat, electricity, magnetism, relativity, and nuclear physics. Prerequisite: PHY 241, MTH 174 or divisional approval. Lecture: 3 hours. Laboratory: 3 hours. Total: 6 hours per week.

Political Science

PLS 135
American National Politics
(3 credits)
Teaches political institutions and processes of the national government of the United States, focuses on the U.S. Congress, presidency and the courts and on their interrelationships. Gives attention to public opinion, suffrage, elections, political parties, interest groups, civil rights, domestic policy and foreign relations. Lecture: 3 hours per week.

PLS 211 – 212
U.S. Government I – II
(3 credits each)
Teaches structure, operation, and process of national, state, and local governments. Includes in-depth study of the three branches of the government and of public policy. Lecture: 3 hours per week.

PLS 241
International Relations I
(3 credits)
Teaches geographic, demographic, economic, ideological and other factors conditioning the policies of countries and discusses conflicts and their adjustment. Lecture: 3 hours per week.

Psychology

PSY 116
Psychology of Death and Dying
(3 credits)
Focuses on psychological aspects of death and dying. Teaches the meaning of death and ways of handling its personal and social implications. Includes psychological, sociological, cultural, and religious views of death. Lecture: 3 hours per week.
PSY 126  
Psychology for Business and Industry  
(3 credits)  
Focuses on the application of psychology to interpersonal relations and the working environment. Includes topics such as group dynamics, motivation, employee-employer relationship and interpersonal communications. May include techniques for selection and supervision of personnel. Lecture: 3 hours per week.

PSY 200  
Principles of Psychology  
(3 credits)  
Surveys the basic concepts of psychology. Covers the scientific study of behavior, behavioral research methods and analysis, and theoretical interpretations. Includes topics that cover physiological mechanisms, sensation/perception, motivation, learning, personality, psychopathology, therapy, and social psychology. Prerequisite: Eligible for ENG 111. Lecture: 3 hours per week.

PSY 213  
Statistics for Behavioral Sciences  
(3 credits)  
Introduces the principles and processes of statistics within behavioral research. Emphasizes understanding and applying statistical tests to behavioral data, stresses recognition and use of process, based upon knowledge and understanding over mathematical derivation. Focuses on selection of appropriate statistics, their application, and correct decisions of interpretation within a behavioral research experience. Lecture: 3 hours per week.

PSY 215  
Abnormal Psychology  
(3 credits)  
Explores historical views and current perspectives of abnormal behavior. Emphasizes major diagnostic categories and criteria, individual and social factors of maladaptive behavior and types of therapy. Includes methods of clinical assessment and research strategies. Prerequisite: PSY 200, PSY 201 or PSY 202. Lecture: 3 hours per week.

PSY 225  
Theories of Personality  
(3 credits)  
Studies the major personality theories and their applications. Includes psychodynamic, behavioral, cognitive and humanistic perspectives. Prerequisite: PSY 200, PSY 201 or PSY 202. Lecture: 3 hours per week.

PSY 230  
Developmental Psychology  
(3 credits)  
Studies the development of the individual from conception to death. Follows a life-span perspective on the developmental tasks of the person’s physical, cognitive and psychosocial growth. Lecture: 3 hours per week.

PSY 235  
Child Psychology  
(3 credits)  
Studies development of the child from conception to adolescence. Investigates physical, intellectual, social and emotional factors involved in the child’s growth. Lecture: 3 hours per week.

Recreation and Parks

RPK 180  
Youth Sports Administration  
(3 credits)  
Prepares coaching professionals to develop and implement emotionally and physically healthful youth sports programs. Includes an analysis of the youth sports program planning process including: philosophy development, learning styles and outcomes, managing parents and players, skills development, risk management, financial planning and strategic partnerships and sports event management. Lecture: 3 hours per week.

RPK 210  
Principles and Psychology of Coaching  
(3 credits)  
Provides an analysis of volunteer coaching and the coaching profession planning process including: philosophy development, learning styles and outcomes, managing parents and players, skills development, risk management, financial planning, drugs and eating disorders in sport and physical training. Lecture: 2 hours. Laboratory: 2 hours. Total: 4 hours per week.

RPK 296  
On Site Training  
(1 credit)  
Specializes in career orientation and training program without pay in selected businesses and industry, supervised and coordinated by the college.

Religion

REL 100  
Introduction to the Study of Religion  
(3 Credits)  
Explores various religious perspectives and ways of thinking about religious themes and religious experience. Lecture: 3 hours per week.

REL 200  
Survey of the Old Testament  
(3 credits)  
Surveys books of the Old Testament, with emphasis on prophetic historical books. Examines the historical and geographical setting and place of the Israelites in the ancient Middle East as background to the writings. Lecture: 3 hours per week.
REL 210
Survey of the New Testament
(3 credits)
Surveys books of the New Testament, with special attention upon placing the writings within their historical and geographical setting. Lecture: 3 hours per week.

REL 230
Religions of the World
(3 credits)
Introduces religions of the world with attention to origin, history and doctrine. Lecture: 3 hours per week.

REL 233
Introduction to Islam
(3 credits)
Studies Islam in its historical, religious, and political dimensions and assists in the understanding of its contemporary vitality and attraction as a faith, a culture and a way of life. Lecture: 3 hours per week.

REL 237
Eastern Religions
(3 credits)
Studies major religious traditions of the East, including Hinduism, Buddhism, Confucianism, Taoism and Zen Buddhism. Includes an analysis of Eastern philosophy and approach to life. Lecture: 3 hours per week.

REL 238
Western Religions
(3 credits)
Studies major traditions of the West that may include, but are not limited to, Judaism, Zoroastrianism, Christianity, Near East, Greek and Roman, African, Native American, European Pagan and New Age spirituality. Lecture: 3 hours per week.

REL 240
Religions in America
(3 credits)
Surveys various manifestations of religion in the American experience. Emphasizes concepts, problems and issues of religious pluralism and character of American religious life. Lecture: 3 hours per week.

REL 247
History of Christianity
(3 credits)
Surveys the development of Christianity from its origins to the present. Lecture: 3 hours per week.

Russian

RUS 101 - 102
Beginning Russian I – II
(5 credits each)
Develops the understanding, speaking, reading, and writing of Russian, and emphasizes the structure of the language. May include oral drill and practice. RUS 102 prerequisite: RUS 101. Lecture: 5 hours per week. May include one additional hour of oral practice per week.

RUS 201 - 202
Intermediate Russian I – II
(3 credits each)
Continues the development of the skills of understanding, speaking, reading, and writing of Russian. Class conducted in Russian. RUS 201 prerequisite: RUS 102 or equivalent. RUS 202 prerequisite: RUS 201 or equivalent. May include oral drill and practice. Lecture: 3 hours per week.

Safety

SAF 130
Industrial Safety – OSHA 10
(1 credit)
Presents an introduction to occupational health and safety and its application in the workplace. Emphasizes safety standards and the Occupational Safety and Health Act (OSHA), its rules and regulations (OSHA 10). Lecture: 1 hour per week.

Sociology

SOC 200
Principles of Sociology
(3 credits)
Introduces fundamentals of social life. Presents significant research and theory in areas such as culture, social structure, socialization, deviance, social stratification, and social institutions. Lecture: 3 hours per week.

SOC 207
Medical Sociology
(3 credits)
Surveys the social, economic, cultural, and individual factors in health and illness. Examines issues of wellness, health-care systems, physician-nurse-patient relationships, medical costs, ethics and policy. Lecture: 3 hours per week.
SOC 211  
Principles of Anthropology I  
(3 credits)  
Inquires into the origins, development, and diversification of human biology and human cultures. Includes fossil records, physical origins of human development, human population genetics, linguistics, cultures' origins and variation, and historical and contemporary analysis of human societies. Part I of II. Lecture: 3 hours per week.

SOC 215  
Sociology of the Family  
(3 credits)  
Studies topics such as marriage and family in social and cultural context. Addresses the single scene, dating and marriage styles, child-rearing, husband and wife interaction, single parent families and alternative lifestyles. Lecture: 3 hours per week.

SOC 225  
Gender and Sex Roles  
(3 credits)  
Analyzes influence of major social institutions and socialization in shaping and changing sex roles in contemporary society. Examines differential access to positions of public power and authority for men and women. Lecture: 3 hours per week.

SOC 226  
Human Sexuality  
(3 credits)  
Studies sociological research and theory on sexuality. Includes anatomy and physiology, birth control, sexually transmitted diseases and sexual behavior. Lecture: 3 hours per week.

SOC 236  
Criminology  
(3 credits)  
Studies research and causal theories of criminal behavior. Examines crime statistics, crime victims, and types of criminal offenses. Introduces role of police, judicial and correctional system in treatment and punishment of offenders. Lecture: 3 hours per week.

SOC 246  
Death and Society  
(3 credits)  
Analyzes death and its relationship to social behavior and societal institutions. Focuses attention on types of death, bereavement, funerals, estate planning/inheritance and the student's own responses to these issues. Lecture: 3 hours per week.

SOC 266  
Race and Ethnicity  
(3 credits)  
Considers race and ethnicity as social constructs that deeply affect our personal experience and our social institutions. Examines the relationships of racial and ethnic groups with each other and with the larger society, and the ways in which these relationships are constantly changing. Explores the experience of different groups and examines ideas of racial justice and equality. Introduces significant theoretical approaches to the study of race and ethnicity. Lecture: 3 hours per week.

SOC 268  
Social Problems  
(3 credits)  
Applies sociological concepts and methods to analysis of current social problems. Includes delinquency and crime, mental illness, drug addiction, alcoholism, sexual behavior, population crisis, race relations, family and community disorganization, poverty, automation, wars, and disarmament. Lecture: 3 hours per week.

Spanish

SPA 101 – 102  
Beginning Spanish I – II  
(4 credits each)  
Introduces understanding, speaking, reading and writing skills and emphasizes basic Spanish sentence structure. May include one additional hour of oral drill and practice per week. Lecture: 4 hours per week.

SPA 103 – 104  
Basic Spoken Spanish I – II  
(3 credits each)  
Teaches oral communication and introduces cultural mores and customs to students with no prior instruction in the language. Lecture: 3 hours per week.

SPA 150  
Spanish for Law Enforcement  
(3 credits)  
Introduces Spanish to those in the criminal justice field. Emphasizes oral communication and practical first-hand police and justice vocabulary. May include oral drill and practice. Lecture: 3 hours per week.

SPA 163 – 164  
Spanish for Health Professionals I – II  
(3 credits each)  
Introduces Spanish to those in the health sciences. Emphasizes oral communication and practical medical vocabulary. May include oral drill and practice. Lecture: 3 hours per week.
SPA 201 – 202  
Intermediate Spanish I – II  
(3 credits each)  
Continues to develop understanding, speaking, reading, and writing skills. Prerequisite: SPA 102 or equivalent. May include oral drill and practice. Lecture: 3 hours per week. May include one additional hour of oral practice per week.

SPA 211 – 212  
Intermediate Spanish Conversation I – II  
(4 credits)  
Continues to develop fluency through emphasis on idioms and other complex sentence structures. Prerequisite: SPA 202 or equivalent. Lecture: 4 hours per week.

Student Development

SDV 100  
College Success Skills  
(1 credit)  
Assists students in transition to colleges. Provides overviews of college policies, procedures, curricular offerings. Encourages contact with other students and staff. Assists students toward college success through information regarding effective study habits, career and academic planning, and other college resources available to students. May include English and math placement testing. Strongly recommended for beginning students. Required for graduation. Lecture: 1 hour per week.

SDV 101  
Orientation to [Discipline]  
(1 credit)  
Introduces students to the skills which are necessary to achieve their academic goals, to services offered at the college and to the discipline in which they are enrolled. Covers topics such as services at the college including the learning resources center; counseling and advising; listening, test taking, and study skills; and topical areas which are applicable to their particular discipline. Lecture: 1 hour per week.

SDV 108  
College Survival Skills  
(2 credits)  
Provides an orientation to the college. Introduces study skills, career and life planning. Offers an opportunity to engage in activities aimed at self-discovery. Emphasizes development of “coping skills” such as listening, interpersonal relations, competence, and improved self-concept. Recommended for students enrolled in developmental courses. Lecture: 2 hours per week.

Welding

WEL 116  
Welding I (Oxyacetylene)  
(2 credits)  
Teaches oxygen/acetylene welding and cutting including safety of equipment, welding, brazing and soldering procedures and cutting procedures. Lecture: 1 hour. Laboratory: 3 hours. Total: 4 hours per week.

WEL 120  
Introduction to Welding  
(2 credits)  
Introduces history of welding processes. Covers types of equipment, and assembly of units. Stresses welding procedures such as fusion, non-fusion, and cutting oxyacetylene. Introduces arc welding. Emphasizes procedures in the use of tools and equipment. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

WEL 123  
Shielded Metal Arc Welding (Basic)  
(3 credits)  
Teaches operation of AC and DC power sources, welding polarities, heats and electrodes for use in joining various metal alloys by the arc welding process. Deals with running beads, butt and fillet welds in all positions. Emphasizes safety procedures. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

WEL 124  
Shielded Metal Arc Welding (Advanced)  
(3 credits)  
Continues instruction on operation of AC and DC power sources, welding polarities, heats and electrodes for use in joining various metal alloys by the arc welding process. Deals with running beads, butt and fillet welds in all positions. Emphasizes safety procedures. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

WEL 130  
Inert Gas Welding  
(3 credits)  
Introduces practical operations in the uses of inert-gas-shield arc welding. Discusses equipment, safety operations, welding practice in the various positions, process applications and manual and semi-automatic welding. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

WEL 150  
Welding Drawing and Interpretation  
(2 credits)  
Teaches fundamentals required for successful drafting as applied to the welding industry. Includes blueprint reading, geometric principles of drafting and freehand sketching, basic principles of orthographic projection, preparation of drawings and interpretation of symbols. Lecture: 2 hours per week.
WEL 160
Gas Metal Arc Welding
(3 credits)
Introduces semi-automatic welding processes with emphasis on practical application. Includes the study of filler wires, fluxes and gases. Lecture: 2 hours. Laboratory: 4 hours. Total: 6 hours per week.

WEL 175
Semi-Automatic Processes
(3 credits)
Introduces semi-automatic processes performed with carbon steel. Emphasizes practical applications in field techniques. Includes the study of filler wires, fluxes and cover gasses. Lecture: 1 hour. Laboratory: 4 hours. Total: 5 hours per week.

WEL 199
Supervised Study
(3 credits)
Assigns problems for independent study incorporating previous instruction and supervised by the instructor. May be repeated for credit. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.
State Board for Community Colleges
Ms. Dorcus Helfant-Browning, Chair
Ms. Idalia Fernandez, Vice Chair
Dr. Glenn DuBois, Secretary

Ms. Carolyn Berkowitz, Burke
Mr. Thomas Brewster, Falls Mills
Ms. Benita Thompson Byas, Reston
Mr. Darren Conner, Callands
Mr. James Cuthbertson, Glen Allen
Ms. LaVonne P. Ellis, Chesapeake
Ms. Idalia P. Fernandez, Centreville
Adm. Robert R. Fountain, Montross
Mr. William C. Hall, Jr., Richmond
Ms. Dorcus Helfant-Browning, Virginia Beach
Mr. David Nutter, Blacksburg
Ms. Eleanor Saslaw, Springfield
Mr. Michael J. Schewel, Richmond
Mr. Don “Robin” Sullenberger, Harrisonburg
Mr. Michel Zajur, Midlothian

Virginia Community College System
Glenn DuBois, Chancellor

John Tyler Community College Board
Ms. Sammie C. Cotman, Chair
Dr. Joyce Rowe, Vice Chair
Dr. Edward E. Raspiller, Secretary

Mr. William A. Barnes, Jr., Prince George County
Ms. Sammie C. Cotman, Charles City County
Mr. N. Greg Cuffey, City of Hopewell
Ms. Gloria Goodwyn Harvell, Dinwiddie County
Mr. Art Heinz, Chesterfield County
Ms. Linda Hyslop, City of Hopewell
Mr. John R. “Bob” Kennedy, City of Petersburg
Mr. Thomas Mattis, City of Colonial Heights
Ms. Bekki Morris, Amelia County
Ms. Sophenia Pierce, Surry County
Dr. Joyce Rowe, Chesterfield County
Dr. Lynn Sodat, City of Hopewell
Mr. John B. Titus, Chesterfield County
Ms. Zelda D. Tucker-Dugger, City of Petersburg
Dr. Mary W. Wilson, Sussex County

John Tyler Community College
Edward E. Raspiller, President
John Tyler Community College Foundation Board

Mr. Peter Eliades, President
Partner, Eliades & Eliades

Ms. Catherine Foca, 1st Vice President
Senior Director, Community Affairs, Capital One

Mr. Ricardo Torres, 2nd Vice President
President and CEO, National Student Clearinghouse

Mr. Andrew E. Glowatsky, Treasurer
Plant Manager, Church & Dwight Co., Inc.

Dr. Edward E. Raspiller, Secretary
President, John Tyler Community College

Mr. Michael White, Past President
President & CEO, Virginia Asset Management, LLC

Ms. Cathee Andrews
Human Resources Director, Amstead Rail/Brenco

Mr. Joshua J. Bennett
Director, Dominion

Mr. Rodney Braziel
Owner, College Hunks Hauling Junk and Moving

Mr. Edward Cahill
Owner, Dragon’s Den Gaming, LLC

Ms. Jo Anne C. Cole, Member Emeritus
President, J. A. Cole Associates, LLC

Ms. Pamela M. Comstock
President, Gilbert C. Martin, Co., Inc.

Ms. Elizabeth “Lizzie” Crabtree
VP, Financial Services – Insurance Specialist, Davenport & Company LLC

Mr. Brian Dail
Operations Manager, Commonwealth Center for Advanced Manufacturing (CCAM)

The Honorable Rosalyn R. Dance
Virginia Senate- 16th District

Mr. Tim Davey
Principal, Timmons Group

Mr. E. Wilson Davis, Jr.
Director of Economic Development, Chesterfield County Economic Development

Mr. Homer C. Eliades, Member Emeritus
Partner, Eliades & Eliades

Mr. Frank Ernesto, IV
CEO, Network Data Security Experts, Inc. (NDSE)

Mr. Dennis J. Falk
Chief Administrative Officer and Treasurer, Village Bank

Mrs. Betty Forbes
President/CEO, Mortgage Company of James River, retired

Mr. Art Heinz
Principal Agent/Owner, Nationwide Insurance

Mr. Anthony Helm
Vice President, Manufacturing, U.S. Smokeless Tobacco Company

Mr. Chuck Hope
General Manager, Haverty’s Furniture Companies, Inc.

Mr. Art Hungerford
Owner/CEO, Atlantic Constructors, Inc.

Mr. Bryce D. Jewett, Jr.
President, Jewett Machine Manufacturing Company, Inc

Mr. Vandy V. Jones, III

Dr. Roy Kaplan
Professor of Chemistry, John Tyler Community College

Ms. Leonda Keniston
Associate Dean, Division of Mathematics, Natural and Health Sciences, John Tyler Community College

Dr. John C. Koch
Professor of Biology, Division of Mathematics, Natural and Health Sciences, John Tyler Community College

Mr. David O. Ledbetter
Partner, Hunton & Williams, retired

Ms. Margaret G. Lewis, FACHE, Member Emeritus
President, HCA-Capital Division, retired

Mr. Tim McManus
CEO, Chippenham & Johnston-Willis Medical Center

Miss Alexandria “Alex” Ritchie
Community Volunteer - Student Representative, John Tyler Community College

Mr. Ron White
District Director and Military Liaison
Office of Congressman J. Randy Forbes (VA-04)
For a continually updated list of John Tyler Community College faculty and staff, please visit the College web site at www.jtcc.edu.
Administration

PRESIDENT
Raspiller, Edward E. “Ted”
A.A., College of DuPage; B.A., Governors State University; M.S.Ed., Ed.D., Northern Illinois University

STAFF
Carter, Kara
Administrative Assistant

Hilliar, Mara M.
Executive Assistant to the President
A.A.S., John Tyler Community College; B.A., University of Virginia

PRESIDENT’S CABINET
Biundo, Rachel
Vice President of Institutional Advancement
B.A., Virginia Polytechnic and State University

Fiege, William C.
Vice President of Learning and Student Success
B.S., Longwood University; M.S., Bloomsburg University; Ph.D., Old Dominion University

Grinnan, Susan F.
Associate Vice President of Human Resources
B.S., Radford University; M.S., Virginia Polytechnic Institute and State University; Senior Professional in Human Resources (SPHR); SHRM-SCP

Jovanovich, Donna
Director, Institutional Effectiveness
B.A., Lake Forest College; M.S.T., University of Wisconsin-Oshkosh; Ph.D., Virginia Commonwealth University

McGinty, Louis L.
Vice President, Community College Workforce Alliance
B.S., United States Naval Academy; M.S., United States Naval Postgraduate School

Taylor, William F.
Vice President, Finance and Administration
B.S., East Carolina University; M.P.A., Virginia Commonwealth University

Walker, Holly W.
Public Relations Manager
B.S., Virginia Commonwealth University; M.L.A., University of Richmond

Human Resources

ASSOCIATE VICE PRESIDENT
Grinnan, Susan F.
B.S., Radford University; M.S., Virginia Polytechnic Institute and State University; Senior Professional in Human Resources (SPHR); SHRM-SCP

STAFF
Green, Adrienne
Human Resource Analyst
B.S., Virginia Commonwealth University

Koval Beverly A.
Payroll Administrator

Legere, Sarah
Payroll/Human Resource Assistant

Smith, Linda
Human Resource Analyst/Benefits Specialist
B.S., Norfolk State University

Watts, Cherie M.
Human Resource Specialist/Recruiter

STAFF
Carrington, Meredith T.
Graphic Designer
B.A., Mary Baldwin College

Horning, Jerad
Web Developer
B.S., Virginia Commonwealth University

Zhai, Jianhua
Web Developer
B.A., Qufu Normal University; M.A., Shandong University

Creative Services

MANAGER
Busch, Heather M.
B.A., University of Virginia; M.A., Virginia Commonwealth University
Institutional Effectiveness

DIRECTOR
Jovanovich, Donna
B.A., Lake Forest College; M.S.T., University of Wisconsin-Oshkosh; Ph.D., Virginia Commonwealth University

STAFF
Archer, Darlene
Data Analyst
B.S., Virginia State University

Owens, Selma S.
Administrative Assistant
A.A.&S., John Tyler Community College

STUDENT ENGAGEMENT

Erika Poindexter
Director of Student Engagement
B.A., Radford University; M.S., University of Maryland

Baines, Beth
Adult Career Coach
B.S., Old Dominion University

Carpenter-Horning, Amanda K.
First Year Retention Coordinator
A.S., Richard Bland College; B.S., Virginia Commonwealth University; M.B.A., Ed.S., Liberty University

Johnston, Wanda
Student Services Specialist
A.A., John Tyler Community College

McCarthy-Burke, Cathleen
STEM-H Coordinator
B.S., M.S., M.T., Virginia Commonwealth University

Sorenson, Ann
Internship and Career Coach
B.S.B.A., University of Arkansas; M.B.A., Averett University; Ed.D., College of William and Mary

Woods, Lawanda
On Ramp Coordinator/Career Coach
B.A., North Carolina Central University; M.Ed., Virginia Commonwealth University

Public Relations

MANAGER
Walker, Holly W.
B.S., Virginia Commonwealth University; M.L.A., University of Richmond

STAFF
Kendrick, Lisa M.
Office and Events Specialist
B.A., Mary Baldwin College

Traylor, Joel
Videographer/Photographer
B.A., James Madison University

Division of Learning and Student Success

VICE PRESIDENT
Fiege, William C.
B.S., Longwood University; M.S., Bloomsburg University; Ph.D., Old Dominion University

STAFF
Mathieu, Jill
Senior Administrative Assistant

Enrollment Management

STAFF
Harrison, Denise
Senior Administrative Assistant

OFFICE OF ADMISSIONS AND RECORDS

DIRECTOR
James, Joy R.
B.S., East Carolina University

STAFF
Baxter, Leigh B.
Assistant Registrar
B.M.E., M.M., Virginia Commonwealth University

Chieppa, Jeffrey
PeopleSoft Programmer & SIS Support Specialist
A.A., County College of Morris; B.B.A., Strayer University

Clarke, Angela B.
Enrollment Services Specialist
A.A.S., A.A.&S., John Tyler Community College

Harrison, Karen M.
Enrollment Services Specialist

Harvey, Marilyn M.
Enrollment Services Specialist
A.A.&S., John Tyler Community College; B.S., Bluefield College

Henley, Barbara D.
Enrollment Services Specialist

Nichols, Barbara J.
Graduation Coordinator
B.A., Mary Baldwin College

Price, Shira
Graduation Coordinator
A.A.S., John Tyler Community College; B.S., Old Dominion University

Sexton, Ashley
Enrollment Services Specialist
B.S., M.Ed., Strayer University
Sorrell, Patsy A.
Assistant Registrar
B.S., Radford University; M.Ed., George Mason University

Szwarc, Carolyn S.
Enrollment Services Specialist
A.A.&S., John Tyler Community College

White, Ashley
Enrollment Services Assistant
A.S., John Tyler Community College; B.S., Old Dominion University

STUDENT INFORMATION CENTER

CALL CENTER MANAGER
Wilkins, Adrienne
B.S., University of Maryland; M.A., Columbia University Teachers College

Byerly, Wendy
Lead Call Center Representative
A.S., Jamestown Community College; B.S., Empire State College

LIBRARY

CHESTER

LIBRARIAN
Luebke, Linda L.
B.A., Gettysburg College; A.M.L.S., University of Michigan

STAFF
Bobowiec, Kristin
Library Acquisitions
B.A., M.L.S., University of Maryland

Hoang, Ha
Library Assistant
B.A., Trinity College; M.S., London School of Economics and Political Science

Painter, Jill A.
Instructional Assistant
A.A.S., John Tyler Community College; B.S., University of Central Florida

MIDLOTHIAN

LIBRARIAN
McKann, Helen H.
B.A., Mary Washington College; M.L.S., University of Maryland

INSTRUCTIONAL TECHNOLOGY STAFF

McLeod, Kenyada
Instructional Designer
B.S., Old Dominion University; M.Ed., University of Phoenix

Petersen, Jacob B.
eLearning Specialist
B.A., M.A., University of Nebraska

Pickering, Tyra
Instructional Designer
B.A., M.A., Ball State University; M.A.T., Earlham College

CAREER PATHWAYS DEPARTMENT

DIRECTOR
Westcott, Peggy A.
B.S., Cornell University; M.A.T., Smith College; Ph.D., Old Dominion University

STAFF

Hicks, Robert
Media Specialist
A.A.S., John Tyler Community College

Kush, Christine M.
Library Specialist
A.A.S., Holy Cross College; B.A., Indiana University

Evins, James M.
Military and Veterans Education Coordinator
A.A., University of Maryland; B.I.S., Virginia Commonwealth University

Lathrop, Carmen
Military and Veterans Education Counselor
A.S., Richard Bland College; B.S., Southern Illinois University; B.A., Saint Leo University

STAFF

Channell, Molli Opal
Reference/Emerging Technologies Librarian
A.A.S., Richard Bland College; B.A., Virginia Commonwealth University; M.L.S., University of North Texas

Marshall, Suzan A.
PEER Consortium Coordinator
B.S., M.S.Ed., Old Dominion University
Muensterman, Victoria
Great Expectations Coach
B.S., University of New Mexico;
M.S., Eastern New Mexico University

Traylor, Wayne
Dual Enrollment Specialist
B.S., Virginia Commonwealth University

Wallin, Joanne M.
Administrative Assistant

Williams, Margaret
Administrative Assistant
A.A.S., Richard Bland College

Office of the Dean of Students

DEAN
Kirkland, Sandra
B.S., M.Ed., Virginia Commonwealth University

Bailey, Tracey
Senior Administrative Assistant
B.S., Western Carolina University

Spencer, Michelle
Assistant Dean of Students
B.A., Auburn University; M.S.W., M.Ed., Virginia Commonwealth University

Tindall, Michelle D.
Director of Student Assistance and Intervention Services
B.A., M.Ed., Virginia State University

COUNSELING AND STUDENT SUCCESS CENTER - CHESTER

INTERIM DIRECTOR
Smith, Altrice
B.S., James Madison University; M.Ed., Virginia State University

STAFF
Atkinson, Heather A.
Interim Professional Counselor and Disability Support Specialist
B.A., University of Mary Washington; M.S., Longwood University

Beverly, Ronald
Professional Counselor
A.S., Thomas Nelson Community College; B.A., Christopher Newport University; M.Ed., College of William & Mary; Ph.D., Walden University

Crites, Tara
Education Support Specialist
A.A.S., Richard Bland College; B.S., M.T., Virginia Commonwealth University

Dean, Randy
Education Support Specialist
A.A., Richard Bland College; B.B.A., M.Ed., College of William and Mary

McCoy, Lakeita
Academic Advisor
B.S., M.S., Virginia Commonwealth University

Morgan-Keeles, Andrea
Administrative Assistant
B.S., Virginia State College

COUNSELING AND STUDENT SUCCESS CENTER - MIDLOTHIAN

DIRECTOR
Varney, Ruth A.
B.S., Auburn University; M.Ed., Ph.D., Virginia Commonwealth University

STAFF
Cassada, Barbie
Student Services Specialist
B.S., Rochester Institute of Technology; M.A., Mary Baldwin College

Mason, Sandra F.
Administrative Assistant

Miller, Mark
Professional Counselor
B.A., University of Pittsburgh; M.S., Shippensburg University; Ph.D., California Institute of Integral Studies

Parrott, Tom
Student Services Specialist
B.A., Bob Jones University; M.A., Calvary Baptist Theological Seminary

Rogers, Bennie
Professional Counselor
B.A., Duke University; M.Ed., George Washington University; J.D., William and Mary Law School

Scott, Chavonn
Academic Advisor
B.A., Virginia State University; M.Ed., Averett University; M.A., National University

Stevens-Davis, Michelle
Student Services Specialist
B.S., Virginia Commonwealth University
Watson, Barbara
Student Services Specialist
B.A., Virginia Intermont College; M.Ed., Virginia State University; M.F.A, Norfolk University

Britt, Gena C.
Professor, Psychology
B.A., Randolph-Macon Woman's College; Ph.D., Virginia Commonwealth University

Burnham, Sharon J.
Assistant Professor, History
B.S., Pennsylvania State University; M.A., University of Richmond

Castleberry, Sean
Associate Instructor, Philosophy
B.A., James Madison University; M.A., George Mason University

Chohan, Saajida
Assistant Professor, English
B.A., M.A., Virginia State University

Coll, Mattie J.
Assistant Professor, English
B.A., M.A., University of Iowa; M.Ed., University of Virginia

Copeland, Myrna F.
Professor, Psychology
B.A., Florida Atlantic University; M.A., Ohio State University; Ph.D., Atlanta University

Dunford, Andrea
Instructor, English
B.S., M.A., University of North Carolina

Durso, Maria
Instructor, English
B.A., Wheaton College; M.A., Middlebury College

Emswiler, Samantha
Instructor, Philosophy
B.A., University of Pittsburgh; M.A. University of Miami

Ferguson, Colin F.
Professor, Art
B.F.A., Edinboro University of Pennsylvania; M.F.A., Ohio University

Fryer, Celia A.
Professor, Spanish
B.A., Mars Hill College; M.A., Ph.D., University of North Carolina

Groner, Matthew
Writing Center Coordinator
B.A., M.A., University of Missouri

Head, David M.
Professor, History
B.A., Furman University; M.A., Ph.D., Florida State University

Horton, Joanne M.
Instructor, Communication Studies and Theatre
A.A.S., State University of New York; B.S., Old Dominion University; M.S., Virginia Commonwealth University; Accredited Public Relations (APR)

Johnson, Judith I.
Associate Professor, English
B.S., Radford College; M.S.B.A., Boston University; M.A., Virginia State University

Kirn, John F.
Associate Professor, History
B.A., Cornell University; M.A., Ph.D., University of Virginia

Landon, Jeffrey W.
Associate Professor, English
B.A., Virginia Commonwealth University; M.F.A., George Mason University

Lewis, Shannon
Instructor, English
B.A., University of South Carolina; M.A., Virginia Polytechnic Institute and State University
**Luke, Ashanti**  
Instructor, English  
B.A., M.P.W., University of Southern California

**Miller, Alyce**  
Associate Professor, History  
B.A., M.A., Ph.D., University of North Carolina

**Morgan, Emily**  
Instructor, English  
B.A., North Carolina State University, M.A., Appalachian State University

**Paden, Mary Grace**  
Assistant Professor, English  
B.A., College of William & Mary; M.A., Georgetown University

**Privott, Janice Meredith**  
Instructor, English  
B.A., B.S., University of North Carolina at Wilmington; M.A., University of Nevada

**Rutz, Michael**  
Instructor, Sociology  
B.S., James Madison University, M.S., Virginia Commonwealth University

**Shaman, Cory**  
Associate Professor, English  
B.A., M.A., Ph.D., Mississippi State University

**Silvent, Christopher**  
Assistant Professor, Art  
B.A., Christopher Newport; M.F.A., Florida State University

**Singer, Katherine D.**  
Professor, Psychology  
B.S., Marywood University; M.A., Ph.D., Fordham University

**Speidel, Penny L.**  
Associate Professor, English  
B.A., Ohio Wesleyan University; M.S., Nazareth College

**Sullivan, Kerrigan J.**  
Professor, Communication Studies and Theatre  
B.F.A., New York University; M.F.A., Brooklyn College

**Tiller, Charlene T.**  
Assistant Professor, Communication Studies and Theatre  
B.S., M.A.Ed., East Carolina University

**Tolj, Alexandr**  
Instructor, English  
B.A., McDaniel College; M.A., California State University - Fullerton

**Vaccarella, Kevin**  
Associate Professor, Religion  
B.A., University of Pittsburgh; M.A., University of South Carolina; Ph.D., Florida State University

**Williams, Jr., James C.**  
Professor, Sociology  
B.A., North Carolina Central University; M.A., Ph.D., University of Connecticut

**Winn, Paula L.**  
Associate Professor, Art  
B.A., M.A., Ph.D., Virginia Commonwealth University

**Yanovitch, Amanda**  
Instructor, English  
B.A., M.A., University of Richmond

---

**Division of Engineering, Business and Public Services**

**Ranson, Julie J.**  
Interim Dean/Professor, Business Management  
B.S., M.S., Ph.D., Virginia Commonwealth University

**Miller, Melinda**  
Interim Associate Dean  
B.S., University of Virginia

**FACULTY**

**Barry, Yvonne**  
Professor, Human Services  
B.S.W., M.S.W., McGill University; Ed.D., University of Massachusetts

**Bell, Lester D.**  
Instructor, Machine Technology  
NIMS Certified, Machining Level 1

**Careatti, John A.**  
Instructor, Engineering  
B.S.M.E., Carnegie Mellon University; Certification Professional Engineer

**Cohen, Mark A.**  
Professor, Information Technology  
B.S., Villa Julie College; J.D., University of Baltimore School of Law; Ph.D., Nova Southeastern University

---

**STAFF**

**Arterburn, Kathy F.**  
Administrative Assistant

**Dixon, Vera**  
Administrative Assistant
Cosby, James L.  
Associate Professor, Business Management  
B.S., Richmond Professional Institute; M.S., Virginia Commonwealth University

Davis, Sherri M.  
Engineering Technologist  
A.A.S., John Tyler Community College

Diggs, Christine H.  
Professor, Human Services  
A.A.S., Central Texas Junior College; B.A., University of North Texas; M.S., University of Texas at Arlington; Ph.D., University of Texas at Austin

Elliott, Jeffrey S.  
Associate Professor, Information Technology  
B.A., Averett College; M.S., Virginia Commonwealth University

Gay, James  
Instructor, HVAC  
Certificate of Boiler Technician  
U.S. Navy; Master Gas Fitting License and Master Heating, Ventilation, and Air License, Virginia Department of Professional and Occupational Regulation

Gross, Matt  
Instructor, Welding  
Certified Welding Educator, Certified Welding Inspector, American Welding Society

Harris, Carolyn B.  
Assistant Professor, Business Management  
B.A., New York University; M.S., Stevens Institute of Technology

Holtzman, Caroline  
Assistant Professor, Engineering  
B.S., M.E., Virginia Polytechnic Institute and State University

Hood, Deborah D.  
Professor, Information Technology  
B.S., Clarion State University; M.A., Western Kentucky University; M.S., Nova Southeastern University

Hooper, Belinda  
Professor, Child Care  
Ed.S., George Washington University; B.S., M.Ed., Ph.D., Virginia Commonwealth University

James, Anglea  
Associate Professor, Business Management  
B.S. Troy University; M.S. Kansas State University; M.B.A., Mississippi State University

Khan, Subhotosh  
Associate Professor, Engineering  
B.S., Indian Institute of Technology; M.S., Duke University; Ph.D., West Virginia University

Massengill, Alan A.  
Instructor, Electricity  
Master Electrician License, Virginia Department of Professional and Occupational Regulation

Miller, Brenda L.  
Associate Professor, Information Technology  
B.A., University of Massachusetts; M.S., Shenandoah University

Nunnally, Patti L.  
Associate Professor Information Technology  
B.S., M.S., Virginia Commonwealth University; Ed.S., College of William & Mary

Olanrewaju, Larry A.  
Professor, Economics  
B.B.A., College of William & Mary; M.A., Virginia State University; M.B.A., Howard University; Ph.D., George Mason University

Parrish, Margaret  
Associate Professor, Accounting  
B.A., Sweet Briar College, M.B.A., University of Pittsburgh, J.D., George Mason University

Silva-Santisteban, Patricia  
Associate Professor, Information Technology  
B.S., National University of Engineering, Peru; M.S., State University of New York

Sorensen, Michael  
Associate Professor, Administration of Justice  
B.S., M.S., Virginia Commonwealth University; Ed.D., University of Missouri

Wyatt, William G.  
Professor, Drafting  
A.A.S., John Tyler Community College; B.S., M.S., Eastern Kentucky University; Ed.D., Virginia Polytechnic Institute and State University

STAFF  
Ball, Cynthia D.  
Administrative Assistant

Bosher, Dianne J.  
Administrative Assistant  
A.A.S., John Tyler Community College
Fears, Linda P.
Administrative Assistant
A.A., Hagerstown Business
College

Division of
Mathematics, Natural
and Health Sciences

DEAN
Weiss, Johanna
B.S., Rolling College; M.S., Ph.D.,
George Mason University

Keniston, Leonda W.
Associate Dean of Mathematics,
Natural and Health Sciences
B.S., M.S., Virginia Commonwealth
University

Colatruglio, Tammy
Director of Nursing
B.S., Medical College of Virginia;
M.S., Walden University

FACULTY
Arnold, Janet
Assistant Professor, Nursing
A.A.S., John Tyler Community
College; B.S., Virginia Polytechnic
Institute and State University;
M.S., University of Phoenix

Beyer, Joressia A.
Associate Professor, Biology
A.S., Dabney S. Lancaster
Community College; B.S., M.S.,
James Madison University

Carlisle, Steven J.
Professor, Biology
B.S., College of William & Mary;
Ph.D., University of Virginia

Carr, Carol E.
Instructor, Biology
B.A., M.A., Hampton University

Chu, Shijian
Assistant Professor, Biology
B.M.E., Shanghai Medical
University; Ph.D., University of Victoria

Clinger, Terri S.
Associate Professor, Nursing
B.S.N., M.S.N., Old Dominion
University

Crowder, Theresa
Assistant Professor, Nursing
A.S., Germanna Community
College; B.S., M.S., George Mason
University

Dail, Edward L.
Associate Professor, Mathematics
B.S., Davidson College; B.Arch.,
University of Tennessee; M.A.T.,
Duke University; Registered
Architect

Danzeisen, Laura L.
Professor, Nursing
A.A., A.D.N., Fort Scott
Community College; B.S.N.,
Saint Mary’s College; M.S.N.,
Troy University; Ph.D., Capella
University

Emos, Ebenezer
Instructor, Mathematics
B.S., Kwame Nkrumah University;
M.S., Youngstown State University

Harpold, Matthew
Assistant Professor, Physical
Education
B.S., James Madison University;
M.S., Georgia Southern University

Hornsby, Barbara J.
Associate Professor, Nursing
B.S.N., M.S.N., Virginia
Commonwealth University

Iannuzzi, Michael P.
Associate Professor, Chemistry
B.S., Old Dominion University;
Ph.D., University of Pittsburgh

Johnson, Therese
Instructor, Mathematics
B.S., M.S., Old Dominion
University

Kaplan, Roy I.
Professor, Chemistry
B.S., University of Mississippi; M.S.,
Georgia Institute of Technology;
Ph.D., West Virginia University

Karch-McBride, Susan
Assistant Professor, Mathematics
B.S., Augusta State University;
M.S., Virginia Commonwealth
University

Langford, Mary H.
Instructor, Emergency Medical
Services
A.A.S., Hudson Valley Community
College

Leahy, Nancy B.
Associate Professor, Nursing
B.S.N., M.S.N., Virginia
Commonwealth University

Linkins, Daniel W.
Assistant Professor, Emergency
Medical Services
A.A., A.A.S., Holmes Community
College

Mason, Christian
Instructor, Mathematics
B.S., University of Virginia; B.S.,
M.S., Virginia Commonwealth
University

Mergliano, Jaime L.
Professor, Biology
B.A., Saint Mary’s College; Ph.D.,
Carnegie Mellon University
Miller, Jodie
Associate Professor, Mathematics
B.S., University of Maryland; B.A., Pennsylvania State University; M.Ed., Columbia State University; Ed.D., Montclair State University

Mohajer, Yousef
Associate Professor, Chemistry
B.S., The City College of the City University of New York; M.A., Ph.D., Princeton University

Mongiovi, Kathleen
Assistant Professor, Nursing
A.A.S., County College of Morris Randolph; B.S., M.S., Thomas Edison State College

Montpetit, Marty
Associate Professor, Biology
B.S., Grand Valley State University; Ph.D., University of South Florida

Moore, Michael M.
Instructor, Funeral Services
A.A.S., John Tyler Community College; B.A., Norfolk State University

Mueller, Linda A.
Associate Professor, Nursing
B.S., University of Rochester; M.S., Syracuse University

Muir, Stephanie J.
Instructor, Mathematics
B.A., Virginia Polytechnic Institute and State University; M.S., Virginia State University

Murudkar, Charu
Associate Professor, Biology
B.S., M.S., University of Pune; Ph.D., Indian Institute of Technology

Overmeyer, Karen
Assistant Professor, Nursing
B.S.N., Ohio State University; M.S., Virginia Commonwealth University

Peterson, Peter R.
Associate Professor, Mathematics
B.A., Edison State College; M.A., College of New Jersey

Pleasant, Rhonda K.
Associate Professor, Funeral Services
A.A.S., John Tyler Community College; B.S., Virginia Commonwealth University; M.S., University of Richmond; Licensed in Funeral Service in Commonwealth of Virginia

Powell, Elizabeth I.
Associate Professor, Nursing
B.S.N., State University of New York; M.S., Virginia Commonwealth University

Randall, Tiffany D.
Associate Professor, Biology
B.S., Washington & Lee University; Ph.D., Carnegie Mellon University

Renault, Pascal D.
Professor, Physics
B.S., Ecole Nationale Superieure des Arts et Metiers, France; M.A., Ph.D., Rice University

Ross, Micaela M.
Assistant Professor, Nursing
B.A., Graceland University; B.S., M.S., Regis University

Russo, Brooke S.
Associate Professor, Nursing
A.D.N., Sandhills Community College; B.S., Armstrong Atlantic State University; M.S.N., Walden University

Saleem, Sabah
Professor, Mathematics
B.S., University of Basrah; M.S., University of Manchester; Ph.D., University of Lancaster

Smeltz, Patricia
Associate Professor, Biology
B.S., Baylor University; Ph.D., Texas A & M University

Smetana, Kristine S.
Professor, Chemistry
B.A., Wheaton College; Ph.D., Virginia Commonwealth University

Snow, Rhodora
Professor, Chemistry
B.S., University of the Philippines; Ph.D., University of New Orleans

Swift, Marian
Instructor, Mathematics
B.A., M.T., University of Virginia

Tran, Phuc
Associate Professor, Physics
B.S., University of Pennsylvania; Ph.D., University of Virginia

Williams, Kenneth E.
Associate Professor, Mathematics
B.S., M.S., Virginia Commonwealth University

Willoughby, Therese
Assistant Professor, Nursing
A.A.S. John Tyler Community College; B.S., Old Dominion University; M.S., University of Phoenix

Xu, Yijing
Professor, Mathematics
M.S., Beijing Normal University; Ph.D., University of Illinois

STAFF
Bearekman, Steve
Lab Technician
A.S., John Tyler Community College; B.S., Virginia Commonwealth University
Estes, Carol A.  
Math Lab Coordinator  
B.A., California State University

Ganzert, Kimberly M.  
Administrative Assistant  
A.A.S., John Tyler Community College

Harris, Aretha R.  
Administrative Assistant

McDaniel, Victoria  
Administrative Assistant

Thomason, Marie W.  
Administrative Assistant  
A.A.S., John Tyler Community College

Finance and Administration

VICE PRESIDENT  
Taylor, William F.  
B.S., East Carolina University;  
M.P.A., Virginia Commonwealth University

STAFF  
Brown, Laurie F.  
Financial Services Specialist

Financial Services

ASSOCIATE VICE PRESIDENT OF FINANCIAL SERVICES  
Quash, Natolyn  
B.A., Fisk University; M.S., Strayer University

Patteson, Rebecca R.  
Fixed Asset Control Specialist

Business Office

STAFF  
Blasco, Jackie A.  
Procurement Specialist

Burton, DeAnna  
Accounting Specialist  
B.S., Strayer University

Campbell, Sheila K.  
Lead Cashier  
A.A., National Business College

Colbert, Doris C.  
Procurement Specialist

Evans, Glenise  
Buyer Specialist  
A.A.S., Commonwealth College;  
B.S., Virginia State University;  
M.B.A., Salem International University;  
M.P.A., Strayer University

Faris, Jennie M.  
Fiscal Technician

Hayes, Lillian W.  
Accounts Payable Specialist

Heath, Carleen B.  
Lead Cashier  
B.S., Virginia State University

Holzbach, Yvonne  
General Accountant

Jimison, Nancy E.  
Procurement Manager

Money, Cynthia A.  
Accounts Payable Specialist  
A.A.S., Paul D. Camp Community College

Scott, Jameelah  
Buyer

Financial Aid

DIRECTOR  
Jones, Tony G.  
B.S., Virginia State University; M.S., Central Michigan University

STAFF  
Aikens, Ericka  
Financial Aid Specialist  
B.S., Virginia Commonwealth University

Brown, Sarah A.  
Financial Aid Specialist  
B.S., Virginia State University

Goode, Christina I.  
Administrative Assistant  
A.S., John Tyler Community College

Martin, Diane  
Administrative Assistant  
B.A.S., University of Richmond

Randolph, Priscilla  
Enrollment Support Specialist  
A.A.S., John Tyler Community College; B.S., Virginia Commonwealth University

Shaw, Geneva  
Financial Aid Specialist  
B.S., Old Dominion University

Smith, Linda C.  
Financial Aid Specialist  
B.S., M.S., Virginia Commonwealth University

Williams, Canyetta D.  
Administrative Assistant
Facilities Operations

DIRECTOR
Dunaway, Gregory  
B.S., M.B.A., Virginia Commonwealth University

Buford, Algernon Sidney  
Project Inspector  
A.S., J. Sargeant Reynolds Community College; B.S., Old Dominion University

Henry, Vicky  
Facilities Project Manager  
B.A., University of Maryland; M.S., University of Massachusetts

CHESTER

BUILDING AND GROUNDS SUPERVISOR - CHESTER
Barner, James  
A.A.S., Southside Virginia Community College; B.I.S., Virginia State University

STAFF
Alley, Shannon  
Grounds Maintenance  
A.S., Richard Bland College; B.S., Virginia Commonwealth University

Chambliss, Kevin  
HVAC Installation and Repair Technician  
A.S., County College of Morris Randolph; B.B.A., Strayer University

Cockrell, Dawn A.  
Administrative Assistant  
A.A.S., John Tyler Community College

Hill, Wayne T.  
Housekeeping Supervisor

Lee, Latasha T.  
Custodial Services Worker

Mitchell, Martin  
Trades Utility Worker

Patteson, Frederick R.  
Grounds Maintenance Supervisor

Pecht, David  
Grounds Maintenance

Ragsdale, Doretha A.  
Custodial Services Worker

Ragsdale, Joseph M.  
Mail Courier

Robinson, Roy  
Housekeeping Supervisor

Robinson, Russell W.  
Postal Specialist  
A.A.S., John Tyler Community College

York, Christopher W.  
HVAC Technician

Young, Eunice  
Housekeeping Worker

MIDLOTHIAN

BUILDING AND GROUNDS SUPERVISOR – MIDLOTHIAN
Williams, John R.

STAFF
Albright III, James E.  
Grounds Maintenance

Beasley, Crevante D.  
Housekeeping Supervisor

Carter, Christie  
Housekeeping Supervisor

Callis, Thomas M.  
HVAC technician

Decker, Jacquelyn  
Grounds Maintenance

Elrod, Terrence L.  
Grounds Maintenance

Harper, Ronnie T.  
Custodial Services Worker

Jenkins, Jason  
Electrical Installation and Repair Technician

Jones, Melvin  
Postal Specialist

Moore, John W.  
Housekeeping Worker

White, Ralph J.  
Custodial Services Worker

Williams, Angela M.  
Administrative Assistant  
A.A.S., Strayer University

Information Technology

ACTING DIRECTOR
Smith, Michael M.  
Network Administrator  
B.S., Frostburg State University

STAFF
Abu-Saleh, Emad M.  
Computer Support Specialist  
A.A.S., South Central Technical College

Blackwell, Scott W.  
Systems Engineer  
B.A., Roanoke College

Chaffin, Penny  
Computer Lab Technician  
A.A.S., John Tyler Community College
Chaoul, Michel F.
Programmer/Analyst
B.S., Lebanese American University

Colcleaser, B. Alice
Computer Lab Technician
A.A.S., John Tyler Community College

DeVaun, Robert J.
Computer Lab Technician
B.S., George Mason University

Greene, Jeffrey S.
Telecommunications Coordinator
B.S., Winthrop University

MacPherson, Dennis P.
Applications Security Administrator
B.S., University of Massachusetts; M.S., George Washington University

Mitchell, Lincoln
Media Specialist
B.A., Virginia Commonwealth University

Ramirez, Jose
Computer Support Specialist
A.A.S., John Tyler Community College

Tookes, La Toria H.
Coordinator, PeopleSoft
B.S., Georgia Southwestern College; M.S., Ed.D., Nova Southeastern University

Williams, Patricia C.
Help Desk Coordinator and Administrative Assistant
A.A.S John Tyler Community College; B.S., Bluefield College

Security
MANAGER
Medaglia, Frank

Kearns, Thomas
Security Supervisor

STAFF
Bean, Kenneth
Security Officer
A.A.S., John Tyler Community College

Daugherty, Bradley N.
Security Officer

Community College Workforce Alliance
VICE PRESIDENT
McGinty, Mac
B.S., United States Naval Academy; M.S., United States Naval Postgraduate School

STAFF
Angel, Rachel
Adult Career Coach
B.A., California State University; M.Ed., Virginia Commonwealth University

Bennett, Mary L.
Workforce Assessment Coordinator
A.A.S., A.A.S., John Tyler Community College; B.A., St. Leo College

Blalock, Lori
Open Enrollment & Marketing Administrative Specialist

Bogue, John
Director, Truck Driver Training

Burrell L. Diane
Administrative Assistant to the VP/Facilities Coordinator

Boyes, Faith
Administrative Assistant, GATE Program

Campbell, Sharon D.
Fiscal Technician

Constantino, Angela
Experiential Learning Coordinator
B.A., College of William and Mary; M.S. Ed., Old Dominion University

Etherington, Suzanne
Contract Training Coordinator
A.S., Jefferson College of Health Science; B.A., University of Richmond

Even, Joanne
Client Solutions Manger
B.A., Washington and Lee University; M.Ed., Virginia Commonwealth University

Faulcon, Sonya
Contract Administrative Specialist/Facility Coordinator
A.S., Harcum College

Fuchs, Claudio
Educate VA Program Support Technician
A.S., J. Sargeant Reynolds Community College; B.S., Virginia Commonwealth University

Gaines, Jim
Assistant Director, Educate VA
B.S., James Madison University; M.A., American Military University

Hasbrouck, Eileen
Educate VA Administrative Assistant
B.S., Gardner Webb University
Hines, Deborah P.
Contract Administrative Specialist/Facilities Coordinator

Hopson, Paula
Rapid Response Administrative Specialist

Hudgins, Mary Pat
Adult Career Coach
B.A., University of Virginia; M.S.W., Virginia Commonwealth University

Jones, Sandra D.
Open Enrollment Administrative Specialist

Kaegi, Kathleen M.
Adult Career Coach
B.S., University of North Carolina; M.S., East Carolina University

Lapsley, Joyce
Contract Training Coordinator
B.S., Indiana University of Pennsylvania; M.Ed., Virginia Commonwealth University

Meredith, Natalie A.
Assistant Vice President for Open Enrollment
A.A.S., Brigham Young University-Idaho; B.B.A., M.B.A., Averett University

Moore, Joseph C.
Business Manager
B.S., Virginia Polytechnic Institute & State University; M.B.A., Virginia Commonwealth University

Morales, Dave
Director, Information Technology
B.S., College of William and Mary

Moss, David
Assistance Vice President for Contract Training
B.S., United States Merchant Marine Academy; M.S., Virginia Commonwealth University

Ogden, Kimberly
Director, Educate VA
B.A., M.Ed., Ed.D., Virginia Commonwealth University

Ornduff, Donna
Instructional Assistant

Pollock, Jameo D.
Rapid Response Coordinator

Reed, Jessica R.
Contract Administrator
A.A.S., John Tyler Community College

Reedy, Ewa
Assessment Center Administrative Specialist
B.S., Bluefield College

Short, Martin
GATE Program Coordinator
B.A., St. Paul's College; M.B.A., Averett University

Sims, Nina
Director of Marketing and Sales
B.S., Virginia Commonwealth University

Smith, Wesley
Contract Coordinator
A.S., J. Sargeant Reynolds Community College; B.S., University of Richmond

Tavel, Brett
Rapid Response Coordinator
B.S., James Madison University; MPA, James Madison University

Valentin, Crystal
Administrator, Truck Driver Training

Vann, Raina
Marketing/Business Administrative Support/Fiscal Technician
B.A., St. Louis University
Emeritus

Comer, Kathy
Classified Employee Emeritus

Eckman, John
Professor Emeritus, English
B.A., Central Missouri State; M.A., University of Tennessee; Ed.D., Ball State University

Evans, Edgar R.
Professor Emeritus, Physical Education
A.A., Ferrum College; B.A., Lynchburg College; M.S., University of Tennessee; S.C.T., Murray State University

Humphrey, Johnnie F.
Professor Emeritus, Education
B.S. Virginia Commonwealth University; M.Ed., Virginia State University

Iacopinelli, Janice P.
Classified Employee Emeritus
B.S., Longwood

Jones, Melton E.
Vice President Emeritus, Academic and Student Services
B.S., American University; M.S., Ph.D., Howard University

Jordan, Joseph T.
Professor Emeritus, Mathematics
B.S., St. Edwards University; M.Ed., Virginia Commonwealth University

Lonon, C. Brian
Professor Emeritus, Mathematics
B.S., North Carolina State University; M.A., Louisiana State University

Nicholas Sr., Freddie W.
President Emeritus
B.S., M.S., Virginia State University; Ph.D., University of Virginia

Ridley, Yvette
Professor Emeritus, Psychology
B.A., Virginia Union University; M.S., Virginia Commonwealth University

Royall, Carole D.
Professor Emeritus, Counseling
B.A., Westhampton College; M.S., Florida State University; Ph.D., University of Virginia

Smith, Marshall W.
President Emeritus
B.A., University of Alabama; M.Ed., West Georgia College; Ph.D., University of Alabama

Tucker, John C.
Professor Emeritus, Psychology
B.A., Roanoke College; M.A., University of Richmond

Tutton, Robert J.
Professor Emeritus, Counseling
B.A., Christopher Newport College; M.S., Virginia Commonwealth University; Ed.S., College of William & Mary; D.A., George Mason University

Via, Sandra
Professor Emeritus, English
B.A., Georgetown University; M.H., M.A., University of Richmond

Wentworth, Mary Beth
Professor Emeritus, English
B.A., Emory and Henry College; M.A., College of William and Mary
Advisory Committees

John Tyler Community College’s curriculum advisory committees are comprised of members of the local community who assist the College in development and enhancement of occupational/technical programs of study. The advisory committees assist in the review and evaluation of educational programs and training equipment and advise the College concerning employment practices, certification and licensure requirements, and other areas related to the training and occupational placement of students.
administration of justice/police science

Mr. Mike Sorensen  
John Tyler Community College

Mr. Jon Cliborne  
Crater Criminal Justice Training Academy

Col. Theirry Dupuis  
Chesterfield County Police Department

Col. Jeff Faries  
Colonial Heights Police Department

Col. Edward Frankenstein  
Prince George Police Department

Maj. Robert Skowron  
Hopewell Police Department

Col. Karl Leonard  
Chesterfield County Sheriff’s Department

Architectural Engineering Technology

Mr. William Anderson  
Architects Dayton & Thompson

Mr. Bruce Cann  
W. H. Stovall & Co. Inc.

Mr. Tim Davey  
Timmons Group

Mr. Stephen Donahue  
Donahue Designs

Mr. Harold Downing  
KOP Architects, PC

Mr. Nick Ivey  
Gilbane Building Company

Mr. Clifton Jones  
Chesterfield County Schools

Mr. Jeff Lepard  
Tindall Corporation

Mr. Stuart Little  
Sekiv Solutions

Mr. Stanley Prince  
The Covington Company

Mr. Bryan Singleton  
Sound Structures

Mr. Dave Taylor  
Resource International, Ltd.

Mr. Patrick Zampetti  
Studio Z Architecture

Civil Engineering Computer-Aided Drafting & Surveying

Mr. William Wyatt  
John Tyler Community College

Mr. Reed Adams, LS, EIT  
Virginia Department of Transportation

Mr. Les Byrnside  
H. B. Surveying

Mr. Mike Carris  
H. B. Surveying

Mr. Melvin Floyd  
Virginia Surveys

Mr. Jack Griffin  
Gene Watson & Associates

Mr. Robert Hopkins  
Austin Brockenbrough

Mr. Paul Kelley  
Virginia Department of Transportation

Mr. Bruce McCloy  
TIMMONS Group

Mr. George Robertson  
Downing Surveys

Air Conditioning Advisory Committee

Mr. James Gay  
John Tyler Community College

Ms. Lisa Crowder  
Sligh Plumbing & Heating

Mr. Bernard Jones  
Cruz Nelson AC & Heating SVC

Mr. Kenneth Lawson  
Virginia Heating & Cooling

Mr. David Mabe, Jr.  
D.G. Mabe & Associates, Inc.

Mr. Cruz Nelson  
Cruz Nelson AC & Heating SVC

Mr. Tom Shipp  
Shipp’s Heating and Air Conditioning

Mr. Robert Townsend  
Central York Corporation

Mr. Bernard Tucker  
Cruz Nelson AC & Heating SVC

Business & Accounting

Mr. Jim Cosby  
John Tyler Community College

Mr. T. K. Britt, Jr.  
Nansemond Fire & Safety

Mr. Howard Deskin  
Impression Marketing

Mr. Ben Droste  
Wolff-Fording & Company

Ms. Lisa Everington  
General Dynamics Information Technology

Dr. Joe Hoyle  
Robins School of Business  
University of Richmond

Mr. Ron Mentzer  
The Distribution Consulting Group

Mr. Samuel Tinsley  
Industrial Galvanizers Virginia, Inc.

Mr. William Vehrs  
ExpressPros
Mr. Charles Townes  
Retired

**Early Childhood Development**

Ms. Belinda Hooper  
John Tyler Community College

Ms. Stephanie Brightly  
Student Representative, JTCC

Ms. Ashley Brinkley  
Student Representative, JTCC

Ms. Dana Cole  
Child Care Provider

Ms. Cory Hall  
Hanover Public Schools

Ms. Joyce Jones  
Hopewell Public Schools

Ms. Debbie Lickey  
St. James Children’s Center

Ms. Deb O’Neill  
Virginia Department of Social Services  
Division of Licensing

Ms. Yolanda Satchell  
Smart Beginnings Hopewell-Prince George

Ms. Katie Sloan  
Smart Beginnings Hopewell-Prince George

**Electrical Technology**

Mr. Alan Massengill  
John Tyler Community College

Mr. Allen Bielair  
Chesterfield Technical Center

Mr. John Cannon  
Retired

Mr. Wayne Cook  
Cook Electric

Mr. Rudy Hawkins  
Electrical Contractor, Inc.

Mr. Dean McCray  
McCray Electric Company

Mr. Keith McCray  
Philip Morris

Mr. William Miller  
C. W. Wright Construction

Mr. Mike Reiter  
McCray Electric Company

Mr. David Siewert  
Virginia Community Colleges

Mr. Mike Stone  
Chewning & Wilmer, Inc.

**Emergency Medical Services**

Mr. Edward B. Bish, Jr.  
Director of Operations  
Southside Virginia Emergency Crew

Mr. Mike Ortega  
Director of EMS Outreach  
St. Mary’s Hospital

Ms. Shannon Daniel  
John Tyler Community College

Ms. Valeta Daniels  
EMS Liaison  
Henrico Doctors Hospital

Mr. John Dugan  
John Tyler Community College

Mr. Charles Feiring  
John Tyler Community College

Ms. Jessica Goodman  
EMS Liaison  
John Randolph Medical Center

Mr. James H. Gould, Jr., RN, EMT-P  
Director  
VCU/CTCCE Education Center

Mr. Kirk Hallett  
John Tyler Community College

Dr. Catherine Henry, MD  
St. Mary’s Hospital

Ms. Heidi Hooker  
Old Dominion EMS Alliance

Mr. Jim Kelly  
John Tyler Community College

Ms. Karen Lea  
Southside Regional Medical Center

Mr. Daniel Linkins  
John Tyler Community College

Mr. Tim McKay  
Chesterfield Fire/EMS

Mr. Chris Pisarek  
Hopewell Police Dept.

Mr. Chris Pond  
Colonial Heights Fire/EMS

Ms. Emily Sims, EMT-I  
Richmond Ambulance Authority

Ms. Holly Sturdevant  
Old Dominion EMS Alliance

Mr. Brad Taylor  
HCA/CJW Medical Center

Mr. Sam Trikoulis  
Hopewell Fire Department

Mr. Damian Winn, EMT  
JTCC EMS Student

Dr. Allen Yee, MD  
Chesterfield Fire/EMS

**Funeral Services**

Ms. Rhonda Keyes Pleasants  
John Tyler Community College

Mr. Michael A. Moore  
John Tyler Community College

Mr. Richard R. Sikon  
Virginia State Anatomical Program  
Virginia Department of Health

Ms. Carol Carr  
John Tyler Community College

Dr. Phillip Murray  
John Tyler Community College

Mr. Damon D. Manning  
Joseph Jenkins Jr. Funeral Home, Inc.

Mr. Richard Brockwell  
Virginia Funeral Directors Association
Mr. Curtis Cunningham  
Virginia Morticians’ Association, Inc.

Dr. Wayne A. Jones  
Virginia State University

Mr. Lewis B. Mayes, III  
Graduate, JTCC Funeral Services Program

Mr. Ernie Markham  
Markham Burial Vault Company

Mr. Barry D. Robinson  
Virginia Morticians’ Association, Inc.

Dr. Kenneth C. Dupree  
National Funeral Directors & Morticians Association, Inc.

Ms. Rachel Sattlefield  
Minister

Ms. Donna Sneed  
Department of Child Support Enforcement

Ms. Patricia Jones-Turner  
Chesterfield County Domestic and Sexual Violence

Mr. Ronald Spears  
Elk Hill

Dr. Joey Wallace  
RESNA Catalyst Project

Ms. Rachel Sattlefield  
Minister

Ms. Donna Sneed  
Department of Child Support Enforcement

Ms. Patricia Jones-Turner  
Chesterfield County Domestic and Sexual Violence

Mr. Ronald Spears  
Elk Hill

Dr. Joey Wallace  
RESNA Catalyst Project

Geospatial Information Systems

Mr. William Wyatt  
John Tyler Community College

Mr. Stuart Blankenship  
Worldview Solutions

Mr. Russell Minich  
TIMMONS Group

Mr. Trent Park  
Virginia Economic Development Partnership

Ms. Nancy Parker  
Chesterfield County

Information Technology

Dr. Mark Cohen  
John Tyler Community College

Mr. Tom Bandy  
BandyWorks, LLC

Ms. Traci Brossfield  
CISCO

Mr. Trent Dorroh  
ABS Technology Architects

Mr. Ivan Gil  
Northrop Grumman Corporation

Mr. Tommy Gorman  
ProActive Information Management

Mr. John Gresham  
The MITRE Corporation

Mr. Alex Hannah  
ABS Technology Architects

Mr. David Horsley  
Metis Connect

Mr. Todd Jenkins  
Capital One Statistics Infrastructure

Mr. Jason Richards  
Federal Reserve

Mr. Jesse Simmons, Jr.  
JES Technical Solutions

Mr. Marvin Smallwood  
Altria Client Services

Mr. R. Scott Steinruck  
Chesterfield Technical Center

Ms. Sue Vencill  
CISCO

Mechanical Engineering

Mr. John Careatti  
John Tyler Community College

Ms. Cathee Andrews  
Amstead Rail Benco, Inc.

Mr. Mike Annechini  
Hill-Phoenix

Mr. Mike Barkle  
Honeywell

Mr. Bill Campbell  
Bear Island Paper

Mr. Randy Carraway  
Smurfit-Stone

Mr. David Christenbury  
Philip Morris, USA

Mr. Spencer Cliborne  
Amsed Rail Brenco, Inc.

Mr. Brian Dail  
Commonwealth Center for Advanced Manufacturing

Mr. Mike Duesberry  
Honeywell

Mr. Bryon Frye  
TXI, Chaparral Steel

Mr. William Gilbert  
DuPont Spruance

Mr. Bob Greene  
Hopewell Cogeneration Limited Partnership

Mr. Nathanial Hull  
Philip Morris, USA

Human Services and Mental Health

Dr. Yvonne Barry  
John Tyler Community College

Mr. Shawn Freeman  
Elk Hill

Ms. Sallye Hardy  
Camp Selah Ministries

Mr. Jeff Hyler  
John Randolph Hospital

Mr. Jeff Hyler  
John Randolph Hospital

Mr. Marvin Smallwood  
Altria Client Services

Mr. R. Scott Steinruck  
Chesterfield Technical Center

Ms. Sue Vencill  
CISCO

Mechanical Engineering

Mr. John Careatti  
John Tyler Community College

Ms. Cathee Andrews  
Amstead Rail Benco, Inc.

Mr. Mike Annechini  
Hill-Phoenix

Mr. Mike Barkle  
Honeywell

Mr. Bill Campbell  
Bear Island Paper

Mr. Randy Carraway  
Smurfit-Stone

Mr. David Christenbury  
Philip Morris, USA

Mr. Spencer Cliborne  
Amsed Rail Brenco, Inc.

Mr. Brian Dail  
Commonwealth Center for Advanced Manufacturing

Mr. Mike Duesberry  
Honeywell

Mr. Bryon Frye  
TXI, Chaparral Steel

Mr. William Gilbert  
DuPont Spruance

Mr. Bob Greene  
Hopewell Cogeneration Limited Partnership

Mr. Nathanial Hull  
Philip Morris, USA

Human Services and Mental Health

Dr. Yvonne Barry  
John Tyler Community College

Mr. Shawn Freeman  
Elk Hill

Ms. Sallye Hardy  
Camp Selah Ministries

Mr. Jeff Hyler  
John Randolph Hospital

Information Technology

Dr. Mark Cohen  
John Tyler Community College

Mr. Tom Bandy  
BandyWorks, LLC

Ms. Traci Brossfield  
CISCO

Mr. Trent Dorroh  
ABS Technology Architects

Mr. Ivan Gil  
Northrop Grumman Corporation

Mr. Tommy Gorman  
ProActive Information Management

Mr. John Gresham  
The MITRE Corporation

Mr. Alex Hannah  
ABS Technology Architects

Mr. David Horsley  
Metis Connect

Mr. Todd Jenkins  
Capital One Statistics Infrastructure

Mr. Jason Richards  
Federal Reserve

Mr. Jesse Simmons, Jr.  
JES Technical Solutions
Nursing

Ms. Patricia Anderson, RN
Children's Hospital of Richmond at VCU

Ms. Carole Cheeley, RN
Chesterfield Technical Center

Ms. Susan Lipp, RN
VCU School of Nursing

Ms. Amy Lubinskas, RN
CJW Medical Center

Ms. Trula Minton, RN
CJW Medical Center

Ms. Frankye Myers, RN
John Randolph Medical Center

Ms. Kay Palmer, RN
Old Dominion University School of Nursing

Ms. Marlene Pratt, RN
VA Medical Center

Ms. Suzanne Robinson, RN
CJW Medical Center

Visual Arts

Ms. Lin Ferrell
Art Educator and Independent Artist

Ms. Karen Gammon
Independent Artist

Mr. Michael Gettings
Chesterfield County Public Schools

Precision Machining Technology

Mr. Les Bell
John Tyler Community College

Mr. Melvin Belcher
Progressive Engineering Company

Mr. Brian Dail
Commonwealth Center for Advanced Manufacturing

Mr. Utley Harrison
Specialty's Our Name

Mr. Bryce Jewett
Jewett Machine & Jewett Automation

Mr. Walter Kelly
Richmond Technical Center

Mr. John McDowell
U.S. Department of Labor/OA

Mr. Roger McGinnis
Richmond Tooling, Inc.

Mr. Brandon Pace
Imperial Machine

Mr. Patrick Pulley
Alstom Power, Inc.

Ms. Kimberly Roberts
Virginia Job Corps/Department of Labor

Mr. Ted Smook
Kosmo Machine

Mr. Scott Vincentz
Electrodyne

Mr. Steve Westermann
460 Machine Company

Welding

Mr. Matthew Gross
John Tyler Community College

Ms. Jennifer Corbitt
Alstom

Mr. Ray Dillard
Arcet Equipment

Mr. Frank Grier
Cronatron Welding Systems

Mr. Rick Holmes
JTCC Adjunct Faculty

Mr. David Kain
Honeywell-Hopewell Plant

Mr. Barry Wash
GTS Welco

Mr. Ryan Wood
Liebherr

Mr. Jon Woodrum
Roberts Oxygen Co., Inc.