Academic Calendar 2014-2015

Fall 2014
General Registration.............................................July 7 – August 22

16-Week Session
Classes begin..............................................................August 25
Last day to add..............................................................August 29
Labor Day (College closed) .....................................September 1
Last day to drop w/refund ..............................................September 11
Founders Day (no classes) .............................................October 7
Last day to withdraw .....................................................November 3
Thanksgiving Break (College closed)..................November 26 -November 30
Classes end ..................................................................January 5
Final exams ...............................................................January 12

1st 8-Week Session
Classes begin..............................................................August 25
Last day to add..............................................................August 27
Labor Day (College closed) .....................................September 1
Last day to drop w/refund ..............................................September 2
Last day to withdraw .....................................................September 29
Founders Day (no classes) .............................................October 7
Classes end .................................................................October 21
Final exams ...............................................................October 30

12-Week Session
Classes begin..............................................................September 2
Last day to add..............................................................September 5
Last day to drop w/refund ..............................................September 15
Founders Day (no classes) .............................................October 7
Last day to withdraw .....................................................October 22
Classes end .................................................................November 25
Final exams ...............................................................December 1

2nd 8-Week Session
Classes begin..............................................................October 22
Last day to add..............................................................October 24
Last day to drop w/refund ..............................................October 30
Last day to withdraw .....................................................November 30
Final exams ...............................................................December 20

Spring 2015
General Registration.............................................November 10-January 9
Commencement..........................................................May 15

16-Week Session
Classes begin..............................................................January 12
Last day to add..............................................................January 16
Martin Luther King Holiday (College closed) .............January 19
Last day to drop w/refund ..............................................January 29
Spring Break (no classes) .............................................March 9-15
Last day to withdraw .....................................................March 29
Assessment Day (no classes) ........................................April 7
Classes end .................................................................May 5
Final exams ...............................................................May 6-12

1st 8-Week Session
Classes begin..............................................................January 12
Last day to add..............................................................January 14
Martin Luther King Holiday (College closed) .............January 19
Last day to drop with a refund .....................................January 21
Last day to withdraw .....................................................February 18
Spring Break (no classes) .............................................March 9-15
Classes end .................................................................March 16
Final exams ...............................................................March 26

12-Week Session
Classes begin..............................................................January 27
Last day to add a class ..................................................January 30
Last day to drop with a refund ......................................February 2
Spring Break (no classes) .............................................March 9-15
Last day to withdraw .....................................................March 23
Assessment Day (no classes) ........................................April 7
Classes end .................................................................April 28
Final exams ...............................................................April 30

2nd 8-Week Session
Classes begin..............................................................March 17
Last day to add ..............................................................March 19
Last day to drop with a refund ......................................March 25
Assessment Day (no classes) ........................................April 7
Last day to withdraw .....................................................April 20
Classes end .................................................................May 12
Final exams ...............................................................May 24

Summer 2015
General Registration..................................................April 6-May 22

10-Week Session (Regular)
Memorial Day (College closed) ........................................May 25
Classes begin..............................................................May 26
Last day to add ..............................................................May 29
Last day to drop with a refund ......................................June 5
College closed ..............................................................July 3
Last day to withdraw .....................................................July 6
Classes end .................................................................August 3
Final exams ...............................................................August 15

1st 5-Week Session
Classes begin..............................................................May 26
Last day to add ..............................................................May 27
Last day to drop with a refund ......................................June 1
Last day to withdraw .....................................................June 15
Classes end .................................................................June 29
Final exams ...............................................................June 30

8-Week Session
Classes begin..............................................................June 15
Last day to add ..............................................................June 17
Last day to drop with a refund ......................................June 22
College closed ..............................................................July 3
Last day to withdraw .....................................................July 16
Classes end .................................................................August 7
Final exams ...............................................................August 15

2nd 5-Week Session
Classes begin..............................................................July 6
Last day to add ..............................................................July 7
Last day to drop with a refund ......................................July 10
Last day to withdraw .....................................................July 27
Classes end .................................................................August 7
Final exams ...............................................................August 15
Message from the President

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
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The information, procedures, regulations, rules and policies listed in this catalog are subject to change by the College, the College Board, the Virginia Community College System or the State Board for Community Colleges. This catalog is for informational purposes only. It is not intended to establish contractual agreements between students and the 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 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.
A Table of Contents is shown with links to various sections of the document. The sections range from Academic Calendar 2014–2015 to Advisory Committees and include topics such as Governance, Course Descriptions, Career Studies Certificates, Applied Arts Degrees, Student Safety Policies, Graduation Procedures, Military and Veterans Benefits, and Tuition and Fees.
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 primarily by state funds, supplemented by contributions from the 10 localities in its service region and by student tuition.

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 currently includes four buildings: an administrative building, two academic buildings and a warehouse/physical plant facility. 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 2012–2013 academic year, John Tyler Community College served more than 14,000 credit students in more than 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.
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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 57-146 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.
General information

• Providing technical support to faculty, staff and students
• Researching new methods, strategies and technologies
• Conducting one-on-one consultation services addressing
• Designing and facilitating professional development and revision of instruction. The responsibilities of the office include:

  - 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

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 25 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 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.

ACADEMIC AFFAIRS

Academic Affairs oversees the programs and curriculums offered to the students at John Tyler Community College. The College’s three academic divisions – Division of Arts, Humanities and Social Sciences; Division of Engineering, Business and Public Services; and Division of Mathematics, Natural and Health Sciences – are part of Academic Affairs as are the offices of Career Pathways and Instructional Technology. The Office of the Vice President of Academic Affairs is located in room M109 of Moyar Hall on the Chester Campus and in room B206f in the Administration Building on the Midlothian Campus.

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:

- 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 any approved site outside of the state of Virginia.
- Shared Services Distance Learning (SSDL): These online courses are offered in partnership with Northern Virginia Community College (NVCC). These courses allow students to earn JTCC credit while taking an online course with a NVCC instructor, as well as use the JTCC Testing Centers to take proctored assessments. SSDL courses are typically courses such as Chinese, Japanese and German. All SSDL courses have a section number that begins with the letters “NV.” SSDL courses have access to all JTCC services as well as services provided by NVCC. Students enrolled in SSDL courses will receive a letter from NVCC and an invitation to participate in an online orientation, and a JTCC liaison provides support during the semester. SSDL courses follow the NVCC academic calendar. Please review course notes for start and end dates.
- 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 classmates 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. 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 are listed in a separate section of the printed class schedule and may be searched in the online schedule by selecting “Virtual” in the “Locations” field.

**DEPARTMENT OF CAREER PATHWAYS**
The Department of Career Pathways provides a variety of career planning services and educational opportunities for students. Career Pathways programs support career exploration, educational preparation, and skill upgrades linked to academic credits and credentials.

Career Pathways programs include:

**Career Coaches**
Career coaches empower middle and high school students to make informed decisions about their career and educational plans and prepare students for success in postsecondary education and training. Career coaches help facilitate the development of career plans and portfolios and connect students to early college programs such as dual enrollment.

**Dual Enrollment**
Dual enrollment classes are college courses taught at area high schools for eligible students that enable the students to get both high school and college credit at the same time. Classes are offered in traditional academic areas, as well as in career and technical areas.

**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 to increase 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.ccwa.vccs.edu).

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 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 homeschooled students interested in admission at the institution should refer to the subsequent sections addressing the enrollment of these populations.)

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.

Curriculum Placement
(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, either by scheduling and taking placement tests at the College or by submitting satisfactory SAT or ACT test scores.
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 in the Schedule of Classes. 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 student services 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 information technology and computer science that were completed more than five years ago are not awarded transfer credit. 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. 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...
accorded 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 restricted to 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 restricted to 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 College 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.

**Home-schooled Students**

Home-schooled students may seek to enroll at John Tyler Community College. These students must satisfy the admission requirements expected of all students, including the completion of placement tests, as well as provide the institution with documentation indicating authorization from the responsible jurisdiction permitting the student to engage in home schooling. The parents of home-schooled students also must provide the institution with written permission to enroll their children. Home-schooled students and their parents must meet with the dean of students (or the dean’s designee) prior to submitting applications for admission.

Enrollment is restricted to home school students studying at the high school junior or senior levels. 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 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 will register on the first day the class begins. Additional information about special enrollment opportunities for senior citizens may be obtained from the Admissions and Records office.

Senior citizens who wish to confirm space in any credit or noncredit class can register and pay as regular students;
however, no refund will be given. Nonpaying senior citizens can enroll on the first day of their selected class and be admitted at no charge only if there is space available.

Seniors will not be allowed to pay for a course to secure a space with the intention of dropping and re-enrolling under senior waiver.

Students who are auditing courses must appear in person or send e-mails to the admissionsandreccords@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 audit courses via myTyler portal.

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 acedemiically suspended from any other institution of higher education may enroll after submitting their college transcripts and copies of their letters of suspension. Students who have been dismissed from any institution, including John Tyler Community College, are normally not admitted to the institution. Dismissed students may petition the Academic Status Committee 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 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 Sexual Offender Registry.

When the College receives such notification, the following procedures apply:

A. The applicant will be denied admission to JTCC in accordance with its admission policy as published in its catalog: Students may be denied admission if there is reason to believe that they present a danger to themselves, other students, faculty or staff.

B. If the applicant registers for classes and becomes a student before the College receives notification, the student will be immediately informed that he/she is being administratively withdrawn from classes.

C. An applicant may invoke his/her rights to an appeal process.

Appeal Process for Denial of Admission or Withdrawal for Convicted Sex Offender
When a convicted sex offender is denied admission to or is administratively withdrawn from classes at John Tyler Community College, he/she may invoke the following appeal process:

A. The applicant or withdrawn student will receive a letter from the dean of students stating his/her denial of admission or administrative withdrawal.

B. The applicant/withdrawn student may write a letter of appeal to the dean of students in which he/she provides 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;
   3. Statement acknowledging his/her identity and status as a convicted sex offender will be publicized on the College campus in accordance with federal and state law if he/she is admitted or reinstated.

Note: If a student is appealing a denial of admission or an administrative withdrawal, he/she must submit the letter of appeal to the dean of students within ten (10) business days of the receipt of the letter from the dean of students informing the student of his/her denial of admission or administrative withdrawal. (A business day is defined as Monday - Friday when the College is open.)

C. The Threat Assessment Team will review the information submitted and make a decision by a simple majority vote within fifteen (15) business days of receiving the letter of appeal. The committee will submit its recommendation to the College president for approval.

D. The dean of students will inform the applicant/withdrawn student by letter of the decision. The president's decision shall be final.

Placement Testing
Placement tests are required for all entering students seeking admission to degree and certificate programs, as well as some career studies certificate programs (see the program listings 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. Students should submit applications of admission prior to scheduling placement tests. John Tyler Community College placement tests are administered by Testing Services. E-mail testing@jtcc.edu or call 804-594-1555.

Math test scores are valid for two (2) years after the date of the test. This includes both the Compass exams administered prior to January 2012 and the currently-used VPT. 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 21 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 sentence skills
will be made only for:

1. A student transferring from another accredited college
to John Tyler Community College with a grade of “D” or
better in a college-level English composition course.

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 with a
grade of “C” or better may enroll in MTH 103 or MTH
120 without testing.

2. A student who has completed three semester hours or
more of college-level algebra or calculus with grades
of “D” or better should contact the academic dean
for the Division of Mathematics, Natural and Health
Sciences for guidance regarding the possible waiver of
the mathematics placement test for specific courses at
John Tyler Community College.

Ability-to-Benefit Academically
Admission of 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. Advising services also are available in the
Student Success Centers and online via AskOnline at
jtcc@askonline.net. 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
are not permitted to register for classes until their accounts
have been paid in full.
A student who is auditing a course is subject to all of the assessment activities. Students are required to participate in the institution’s assessment of its academic programs 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 and academic requirements of the class. The instructor of such a course is similarly 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.

Permission of the appropriate academic dean 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. SSDL students 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, DANTES 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 JTCC. 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 course material 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 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 01–09).
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. 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 the College into the total number of quality points earned at John Tyler Community College. Courses for which “R,” “P,” “C,” 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.

Grade Change Policy
A student request for consideration of a grade change will only be undertaken within one year of the end of the semester in which the course was taken. Such a request must be submitted to the appropriate academic dean. A student’s failure to adhere to College policies and procedures addressing the dropping of and withdrawing from a class(es) does not constitute a justification for consideration of a grade change. Exceptions to the one-year deadline may be made by the vice president for academic affairs or designee if warranted by extraordinary circumstances. Refer to Student Grade Appeal Policy in this publication.

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 the forwarding of official copies of their transcripts to other institutions by contacting the Admissions and Records office. Requests for mailing of official and unofficial student copies of transcripts will be handled within seven working days of the receipt of the request at a charge of $3.00 per copy to the student. A third party vendor is available to provide official transcripts electronically via e-mail. A URL will be posted on the JTCC web site for students to access to order transcripts. 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 permanently retains each student’s academic transcript.

Students 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.

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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 the forwarding of official copies of their transcripts to other institutions by contacting the Admissions and Records office. Requests for mailing of official and unofficial student copies of transcripts will be handled within seven working days of the receipt of the request at a charge of $3.00 per copy to the student. A third party vendor is available to provide official transcripts electronically via e-mail. A URL will be posted on the JTCC web site for students to access to order transcripts. 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 permanently retains each student’s academic transcript.

Students may request the forwarding of official copies of their transcripts to other institutions by contacting the Admissions and Records office. Requests for mailing of official and unofficial student copies of transcripts will be handled within seven working days of the receipt of the request at a charge of $3.00 per copy to the student. A third party vendor is available to provide official transcripts electronically via e-mail. A URL will be posted on the JTCC web site for students to access to order transcripts. 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/assistant 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 maintain a cumulative 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 status 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 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. 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 $7.50 per credit hour technology fee. Virginia residents are exempt from the $15.00 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.

Residency
A student under the age of 24 generally assumes the domiciliary status of the parent(s) unless one of the following criteria is met. The student:

• Is age 24 before the first day of classes;
• Is a veteran of the U.S. armed forces;
• Holds a bachelor’s degree or higher;
• Is married;
GENERAL INFORMATION

• Is orphaned;
• Is a ward of the court;
• Has legal dependents other than a spouse; or
• Can present clear and convincing evidence that he or she is self-sufficient.

The Admissions and Records office is responsible for making an initial determination of eligibility for in-state tuition rates based on information provided by the student on the application form. Eligibility is determined by using State Council of Higher Education guidelines pertaining to Section 23.7-4 of the Code of Virginia.

Applicants who are denied in-state tuition have the right of appeal according to the following procedures:

- Intermediate Level Review: Appeals must be submitted in writing to the Admissions and Records office at least two weeks prior to the date of the requested entitlement (the first day of classes of the semester in question). The director of Admissions and Records/registrar will review such appeals and issue decisions within five days or prior to the first day of classes. Appeals received less than two weeks prior to the date of requested entitlement will not be considered until after the subsequent add/drop period. Students may elect to register and pay out-of-state tuition charges pending the resolution of their appeals.

- Final Administrative Review: Appeals of the intermediate level review must be submitted in writing to the Office of the vice president of Student Affairs. Such appeals must be submitted no later than five business days after the receipt of intermediate level decisions. The Appeals Committee (president, vice president of Finance and Administration, and vice president of Student Affairs) will review such appeals and forward its decisions to students within ten business days of the receipt in accordance with Part VII, Section 8 VAC 40-120-270, Chapter 120, Guidelines for Determining Domicile and Eligibility for In-State Tuition Rates.

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.

Books and Materials

Students are expected to obtain their own books and supplies.

Refund Policy

A full refund of tuition is authorized for credit hours of course(s) dropped during the first 15 percent of the session. (Specific dates are printed in the schedule of classes.) If a student registers for a course that is cancelled by the College and does not elect to enter an alternate course, the student is eligible for a refund. Students can print their receipts online if needed. Students who drop classes after the published date will not receive a refund.

FINANCIAL 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 5 (Guaranteed). The dates for applying for financial aid for the spring semester are September 15 (Priority) and November 2 (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.

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 6 or November 2 dates (see the previous paragraph);
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.

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 $5157 or less. The maximum award for the 2014-2015 academic year is $5,730, with a minimum of $587. 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 or underemployed 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 the On-Ramp Program web site www.jtcc.edu/onramp or by contacting John Tyler Community College’s On-Ramp Program coordinator at onramp@jtcc.edu. 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 which 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.

VGAP (Virginia Guaranteed Assistance Program)
VGAP awards range from $500 up to tuition, fees and books. For students available to undergraduate Virginia residents who graduated from high school with at least a 2.5 grade point average. Students must be enrolled full time with at least a 2.0 cumulative grade point average to maintain eligibility for this grant.

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 Benefits
The Military and Veteran Benefits Office assists eligible active duty service memebers, 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 Certificates of Eligibility to VA staff during their initial visits in order to be certified. Certification requests must be initiated in person or via the veterans@jtcc.edu e-mail account.
immediately after enrollment. Enrollment adjustments that take place after certification, such as course drops, adds, swaps, and withdrawals, must be reported in person or via the veterans@jtcc.edu e-mail account. Any debt that may be incurred as a result of unreported enrollment adjustments will require payment in accordance with College policy. Eligible veteran students and their dependents, who are granted out-of-state domicile status upon completion of their online applications, should notify a member of the VA staff in order to receive instructions for a potential change of status. Eligible veteran students are encouraged to consider using the VA Work-Study and the VA Tutorial Assistance programs while attending school as they are valuable resources. The VA will only pay in-state rates for tuition.

John Tyler Community College is a proud member of the Servicemembers Opportunity Colleges (SOC) Consortium and committed to providing servicemembers, their families and veterans with ready access to low-cost, quality educational opportunities. Because servicemembers move so frequently, we maintain transfer practices which minimize the loss of credit for courses taken at another college or university and avoid duplication of coursework. Additionally, we limit academic residency for active duty service members to only 25%. This means that an active duty servicemember can earn a degree by taking as little as one quarter of his/her required courses for a degree program at John Tyler Community College. Lastly, we award credit for military training and experience as outlined in the ACE Guide and credit for extra institutional learning using one or more nationally-recognized, non-traditional learning tests (CLEP and DSST).

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 the website at www.jtcc.edu/financialaid.

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

- Students must earn 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.

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<tr>
<th>Credit Hours Attempted</th>
<th>Minimum Required GPA</th>
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<tbody>
<tr>
<td>1 - 15</td>
<td>1.50</td>
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<tr>
<td>16 - 30</td>
<td>1.75</td>
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<tr>
<td>31+</td>
<td>2.00</td>
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- 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, gifts to the Foundation are an investment in the future of the community. Through donations, grants and endowments, the Foundation is able to provide scholarships for students to help them pay for John Tyler Community College tuition, books and fees. To qualify:

- Submit a completed scholarship application package prior to the appropriate deadline.
- Possess a 2.5 minimum cumulative grade point average (GPA).
- Be enrolled or plan to enroll in a certificate and/or degree program at John Tyler.
- Have in-state tuition status.
- Have a completed, current Free Application for Federal Student Aid (FAFSA) on file at JTCC on or before the scholarship deadline.

All scholarship recipients are required to attend the Scholarship Celebration event in August.

A complete scholarship list, application form, and eligibility criteria are available at www.jtcc.edu/scholarships. The application deadline for the John Tyler Community College International Studies Scholarship for summer study abroad is March 15. The application deadline for all other scholarships is April 15.

For more information, visit www.jtcc.edu/scholarships. For questions, call 804-594-1574 or e-mail foundation@jtcc.edu.

GRADUATION PROCEDURES
Graduation Requirements
To be awarded an associate degree, certificate or career studies certificate, a student must:

1. Fulfill all course and credit hour requirements specified in the John Tyler Community College Catalog at the time of his or her official placement in the curriculum. Subsequent program changes may necessitate course substitutions, but these can only be made with the recommendation of the student’s academic advisor and the approval of the appropriate division dean.
2. Earn a minimum of 25 percent of the total semester
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 curriculum (career plan) for which he or she is seeking graduation. A student may only be in one curriculum (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 (http://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 (http://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.

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 curriculum (career plan) for which he or she is seeking graduation. A student may only be in one curriculum (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
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   - For spring semester candidates: September 15

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   - 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.

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.

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.

STUDENT AFFAIRS
Student Affairs is comprised of the offices of the Vice President for Student Affairs, the Dean of Students, Admissions and Records, Veterans Affairs, Student Activities, First-Year Student Experience, and the College Libraries. Services provided by personnel in Student Affairs include assistance with admissions, registration, and applying for graduation; student orientation; counseling and academic advising; career exploration and development; transfer information; tutoring; student activities; services for students with special needs; services for veterans; judicial affairs; student health education; testing services; library services. The Office of the Vice President for Student Affairs is located in room M101c in Moyar Hall on the Chester Campus and in room B206g in the Administration Building on the Midlothian Campus. The Office of the Dean of Students is located in room M107e in Moyar Hall on the Chester Campus and in room B213 in the Administration Building on the Midlothian Campus.

Counseling
Professional counselors and student services specialists 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 help 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.

Career Development Services
Students seeking assistance with career development should contact the Counseling Centers at the Chester and Midlothian campuses. 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 in interviewing and resumé 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, study skills and transferring to senior institutions. Computer workstations are available where students may use tutorial software or work on writing assignments.

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). The Student Activities Office also coordinates student ID cards, voter registration, community service projects, student newsletters, the student emergency fund, clubs and intramural athletics. 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.

Twelve-two 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, Environmental Science Club, Computer Club, and the Latin American Culture 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, Student Virginia Education Association, and the Student Nurses’ Association.

Religious Organizations: Disciples of Christ.

Special Interest Organizations: Book Ends, Creative Writing Club, Origami Club, Latin Culture Club and Student Veteran’s Organization.

Recreational Organizations: JTCC Soccer Club, JTCC Running Club, JTCC Ultimate Frisbee 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 those 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.
Students with Disabilities

John Tyler Community College is committed to the goal of providing each qualified student equal opportunity to pursue a college education. Professional counselors skilled in disabilities support services are available at each campus. Timely requests for special services enable the College to better serve students. Students with documented disabilities who require assistance should contact the Counseling Centers at either the Midlothian Campus or the Chester Campus at least 30 days prior to the start of classes. Professional counselors will assist students with their special needs, including accommodations on placement testing, instructional accommodation plans, consultation services with faculty and staff, assistance with registration, career counseling, study skills, note taking, mobility assistance and other services depending on individual needs and the availability of resources.

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) must be developed for any student identified as having a disability, and schools must 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 identifying their disabilities, the need for accommodations and providing documentation to the College’s disability support specialists. The College must provide “reasonable accommodations” to students with disabilities under Section 504 and the Americans with Disabilities Act 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. Additional information on the student conduct code and the student disciplinary procedure can be found in this publication or the PDF version found on the web site at www.jtcc.edu/publications. The dean of students is responsible for the administration of all student disciplinary procedures.

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

Libraries at both campuses serve as the academic centers of the College, providing students with the digital and print resources necessary for their coursework, as well as comfortable places to study. The Chester Campus Library is on the second floor of Moyar Hall. The Midlothian Campus Library is on the second floor of Hamel Hall.

Students are encouraged to familiarize themselves with Library resources early in their academic careers. Library cards may be obtained upon presentation of photo identification.

The Library schedule is the same during fall, spring and summer 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.

Hours vary during breaks and holiday periods. Any changes are posted on the website.

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, a 24/7 chat reference service is available on the Library website, 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 706-5195
Midlothian 594-1519
Web Site: 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.

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.

(Times are subject to last minute emergency changes)

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 College Student Information System. The Information Center, located on the Chester Campus in Goyne Hall, room A105b, 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**

**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.

**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 in a manner and place that ensure 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 should inform the student in confidence that the student is being found guilty of an act of academic dishonesty and specify the disciplinary action that is being administered.

**Disciplinary Actions**

Having accused and found guilty a student of academic dishonesty, faculty members must administer one of the following disciplinary actions:

1. A formal warning: An oral or 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 guilty of engaging in any subsequent act of academic dishonesty.

2. A formal warning and the requirement that the student repeat or re-submit the quiz, test, examination, exercise or assignment in question.

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. Removal of the student from the class and the assignment of the grade of “F” in the course.

**Reporting Acts of Academic Dishonesty to the Dean of Students**

A faculty member must provide the Dean of Students with a written report of any disciplinary action taken in response to an act of academic dishonesty. Such a report must be forwarded to the Dean 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.
Disciplinary Actions that May be Taken by the Dean of Students

All reports of academic dishonesty will be reviewed by the Dean. If a student has been found guilty of any prior acts of academic dishonesty, the Dean of Students may either (1) suspend the student from the institution for a period of time not to exceed one year or (2) dismiss the student from the College. The student will be notified by the Dean of Students in writing of such action within ten (10) business days. A statement of this action will be included in the student’s academic record. A student who is suspended or dismissed will be immediately withdrawn from all course work in which he or she is enrolled, 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 guilty of committing 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.

The Committee on Academic Integrity

The Committee on Academic Integrity is appointed annually by the president of the College 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 written 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 without the prior authorization of the Chair of the Committee. Such requests must be submitted to the Chair no less than 48 hours prior to 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 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.

Appeals to the Vice President for Student Affairs

A student may appeal the decision of the Committee on Academic Integrity in writing to the Vice-President for Student Affairs within ten (10) business days of the receipt of the Committee’s decision. The Vice-President will review the entire academic dishonesty proceeding and provide the student with a written notification of his findings and decision within ten (10) business days of the receipt of the appeal.

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. 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 appropriate campus judicial affairs officer within fifteen (15) business days of the infraction.

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 campus judicial affairs officer.

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 campus judicial affairs officer and are prohibited from returning to the College libraries until the allegations have been adjudicated.

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.

**Student Administrative Hearing**

After reviewing allegations, specifying the charges, and obtaining any necessary information, the campus judicial affairs officer will contact the student via mail, requesting a meeting to discuss the case with the student, including the nature and source of the charges and the student's rights and responsibilities. During this discussion, the student may question the credibility of his or her accusers or other witnesses by submitting questions through the campus judicial affairs officer. The student will be given an opportunity to review any and all materials, which may have been presented as evidence against him/her. The campus judicial affairs officer also may seek guidance from the Threat Assessment Team. Following this review, the campus judicial affairs officer will either impose a disciplinary sanction or vacate the charges. This decision will be forwarded to the student in writing within ten (10) business days of the initial meeting between the campus judicial affairs officer and the student.

All records of the infraction and materials pertaining to and resulting from the inquiry (and any subsequent appeal) will be forwarded to the Office of the Dean of Students. This information will remain in the dean's office.

**Appeals to the Dean of Students**

If the campus judicial affairs officer imposes a disciplinary sanction, the student may appeal the sanction in writing to the dean of students within ten (10) business days of the receipt of the campus judicial affairs officer's decision. The dean will review the entire disciplinary proceeding and provide the student with a written notification of his/her findings and decision within ten (10) business days of the receipt of the appeal. The dean may request to meet with the student during his/her deliberations.

**Appeals to the Vice President of Student Affairs**

A student may appeal the decision of the dean of students to the vice president of student affairs in writing within ten (10) business days of the receipt of the dean's decision. The vice president will review the dean's decision and provide the student with a written notification of his/her findings within ten (10) business days of the receipt of the appeal.

**Disciplinary Actions**

Disciplinary actions available to the campus judicial affairs officer are as follows:

1. Removal of the charges against the student.

2. Admonition: An oral or written statement to a student that he/she is violating or has violated College rules and may be subject to more severe disciplinary action.

3. 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.

A student, pending a hearing by the campus judicial affairs officer, may be suspended by the president (or in the president's absence, the College vice president for students affairs or the dean of students) 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 president, vice president or dean also may seek guidance and input from the Threat Assessment Team. Nothing in these procedures should be construed to prevent the president from taking such official steps as he/she may deem 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 informal opportunity to make an oral response, except in exigent circumstances, in which case the student will be given said opportunity as soon as possible as determined by the president.

**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. (A business day is defined as a Monday through Friday when the College is open.) 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. 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. The vice president 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 response, he or she may appeal to the College president 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. The president will discuss the grievance with all concerned parties and make a decision regarding the issue within ten business days after receipt of the correspondence. This decision will be final.

**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 Academic Affairs).

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 Academic Affairs, 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 Academic Affairs (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 VPAA 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 VPAA. 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 VPAA 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 VPAA (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.

**STUDENT SEXUAL MISCONDUCT COMPLAINTS PER TITLE IX**

**Students Who May Be Victims of Sexual Misconduct**
Your health, safety, and well-being are the College’s primary concern. If you or someone you know may be the victim of any form of sexual misconduct, you are strongly urged to seek immediate assistance. Assistance can be obtained 24 hours a day, seven days a week from:
- Police (Chesterfield County): 911
- Virginia Family Violence & Sexual Assault Hotline: 1-800-838-8238 (24/7)
- Campus Security, Chester Campus: 804-796-4025
- Campus Security, Midlothian Campus: 804-897-6678

During business hours (8:00 a.m. to 5:00 p.m., Monday through Friday), you are also strongly urged to contact the Dean of Students, who is the designated Title IX coordinator for purposes of this Policy (as hereinafter defined), by telephone, at 804-706-5208 at the Chester Campus and 804-594-1566 at the Midlothian Campus; by e-mail at skirkland@jtc.edu; or at the Office of the Dean of Students, Administration Building, room B213 at the Midlothian Campus or Moyar Hall, room M107e at the Chester Campus, as soon as reasonably possible to report any sexual misconduct you believe may have occurred.

This Policy covers complaints of alleged sexual misconduct by College students. If you or someone you know may be the victim of sexual misconduct by a member of the College faculty or staff, you may report such misconduct or file a complaint with the College's Title IX Coordinator or with Campus Security. Further information about Title IX and sex discrimination in education is available from the Office for Civil Rights, 400 Maryland Avenue, SW, Washington, DC 20202-1100 (by Customer Service Hotline: 800-421-3481; fax: 202-453-6012; TDD: 877-521-2172; e-mail: OCR@ed.gov; or on the web at http://www.ed.gov/ocr).
I. Introduction
A. Overview and Purpose.
Sexual Misconduct, as defined by this Policy and Procedures for Student Sexual Misconduct Complaints (this “Policy”), comprises a broad range of behavior that will not be tolerated in the College’s community of trust. For purposes of this Policy, “Sexual Misconduct” includes Sexual Exploitation, Sexual Harassment, Non-Consensual Sexual Contact, and Non-Consensual Sexual Intercourse, each as more fully defined below. Sexual Misconduct violates College policy and Federal civil rights law and may also be subject to criminal prosecution. The College is committed to fostering a community that promotes prompt reporting of all types of Sexual Misconduct and timely and fair resolution of Sexual Misconduct complaints. Creating a safe environment is the responsibility of all members of the College community.

As a recipient of federal funds, the College 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 education programs or activities. Sexual Misconduct, as defined in this Policy, is a form of sex discrimination prohibited by Title IX. The College is committed to providing programs, activities and an educational environment free from sex discrimination.

As a public institution, John Tyler Community College also must provide due process to students accused of Sexual Misconduct. This Policy is designed to provide a fair process for both parties while also ensuring a complainant’s protections under Title IX. Consistent with due process, an accused student is presumed innocent until proven otherwise under this Policy.

The College is also required and committed to upholding the First Amendment of the United States Constitution. Nothing in this policy is intended to abridge the rights or freedoms guaranteed by the First Amendment.

B. Definitions.

“College” means John Tyler Community College.

“Dean” means the Dean of Students and his or her designee. The College has designated the Dean as the Title IX Coordinator for purposes of this Policy.

“Dean’s Office” means the Office of the Dean of Students, located in Moyar Hall on the Chester Campus and in the Administration Building on the Midlothian Campus.

“Effective Consent” means words or actions that show a knowing and voluntary agreement to engage in mutually agreed-upon sexual activity. Effective Consent cannot be gained by Force, by ignoring or acting in spite of the objections of another, or by taking advantage of the Incapacitation of another, where the accused student knows or reasonably should have known of such incapacitation. Effective Consent is also absent when the activity in question exceeds the scope of Effective Consent previously given. In addition, certain states have designated a minimum age under which a person cannot give “Effective Consent.”


“Force” means physical force, violence, threat, intimidation or coercion.

“Formal Resolution” means a complainant may elect to pursue a hearing before a panel of the Sexual Misconduct Board.

“Incapacitation” means the physical and/or mental inability to make informed, rational judgments. States of Incapacitation include, without limitation, sleep, blackouts, and flashbacks. Where alcohol [or other drug] is involved, one does not have to be intoxicated or drunk to be considered Incapacitated. Rather, Incapacitation is determined by how the alcohol consumed impacts a person’s decision-making capacity, awareness of consequences, and ability to make informed judgments. The question is whether the accused student knew, or a sober, reasonable person in the position of the accused student should have known, that the complainant was Incapacitated. Because Incapacitation may be difficult to discern, students are strongly encouraged to err on the side of caution; i.e., when in doubt, assume that another person is Incapacitated and therefore unable to give Effective Consent. Being intoxicated or drunk is never a defense to a complaint of Sexual Misconduct under this Policy.

“Informal Resolution” means a complainant who wishes to file a formal complaint with the Dean’s Office but who does not wish to pursue Formal Resolution may request a less formal proceeding.

“Investigators” mean the individuals designated by the Vice President to conduct investigations of alleged Sexual Misconduct and to determine whether or not there is good cause to grant a hearing, all as more particularly described in Section 4, below.

“Non-College Conduct” means conduct that occurred somewhere other than on College owned or leased property, such as at an off-site College-sanctioned function; at the permanent or temporary local residence of a College student, faculty member, employee, or visitor; or elsewhere.

“Sexual Contact” means the deliberate touching of a person’s intimate parts (including genitalia, groin, breasts or buttocks, or clothing covering any of those areas) or using Force to cause a person to touch his or her own or another person’s intimate parts.

“Sexual Exploitation” means taking sexual advantage of another person without Effective Consent, and includes, without limitation, causing or attempting to cause the Incapacitation of another person in order to gain a sexual advantage over such other person; causing the prostitution of another person; recording, photographing or transmitting identifiable images of private sexual activity and/or the intimate parts (including genitalia, groin, breasts or buttocks) of another person; allowing third parties to observe private sexual acts; engaging in voyeurism; and/or knowingly or recklessly exposing another person to a significant risk of sexually transmitted infection, including HIV.
“Sexual Harassment” means unwelcome conduct, based on sex or on gender stereotypes, which is so severe or pervasive that it unreasonably interferes with a person’s College employment, academic performance or participation in College programs or activities and creates a learning, working, program or activity environment that a reasonable person would find intimidating, hostile or offensive. Sexual Harassment may include, for example, unwelcome sexual advances, requests for sexual favors, and acts of sexual violence. In evaluating any complaint of Sexual Harassment, the perceived offensiveness of a particular expression, standing alone, is not sufficient by itself to constitute Sexual Harassment. The conduct in question must be objectively intimidating, hostile or offensive, and interfere with a person’s right to equally participate in programs and activities of the College. The exclusive purpose of this Policy is to protect students from sex discrimination, consistent with both federal regulatory law and the requirements of the First Amendment to the United States Constitution.

“Sexual Intercourse” means penetration (anal, oral or vaginal) by a penis, tongue, finger, or an inanimate object.

“Sexual Misconduct” is a broad term encompassing “Sexual Exploitation,” “Sexual Harassment,” “Non-Consensual Sexual Contact,” and “Non-Consensual Sexual Intercourse,” as defined in this Policy. Sexual Misconduct can occur between strangers or acquaintances, including people involved in an intimate or sexual relationship. Sexual Misconduct can be committed by men or by women, and it can occur between people of the same or different sex.

“Sexual Misconduct Board” means the standing committee appointed by the Vice President to hear complaints of Sexual Misconduct.

“Standards of Conduct” means the College Student Conduct Code, contained in the Student Handbook.

“Vice President” means the Vice President for Student Affairs and his or her designee.

“Vice President’s Office” means the Office of the Vice President for Student Affairs.

II. Jurisdiction; Timing; Retaliation and Related Misconduct; Criminal Proceedings

A. Jurisdiction.

Personal Jurisdiction. Any person may file a complaint of Sexual Misconduct against a “College student” under this Policy. A “College student” means any student who is registered or enrolled at the College (a) at the time of the alleged Sexual Misconduct (including Sexual Misconduct that is alleged to have occurred during any academic recess, provided that there is an expectation of such student’s continued enrollment at the College), and (b) at the time that the Dean prepares and delivers to the Investigators a formal complaint against such student pursuant to Section III.B, below.

Geographic Jurisdiction. This Policy applies to any allegation of Sexual Misconduct against a College student, regardless of where the alleged Sexual Misconduct occurred. Although there is no geographical limitation to invoking this Policy, Sexual Misconduct that is alleged to have occurred at a significant distance from the College may be more difficult to investigate. In addition, with respect to any complaint (a) by a person who is not a member of the College community, and (b) relating to Non-College Conduct, the College reserves the right to determine, in its sole discretion, whether the conduct described in the complaint constitutes a sufficient risk to the College community to warrant processing the complaint.

B. Timing of Complaints and Availability of Procedures. So long as there is personal jurisdiction over the accused student pursuant to Section II.A. above, there is no time limit to invoking this Policy in responding to complaints of alleged Sexual Misconduct. Nevertheless, students are encouraged to report alleged Sexual Misconduct immediately in order to maximize the College’s ability to obtain evidence, and conduct a thorough, impartial and reliable investigation. Failure to promptly report alleged Sexual Misconduct may result in the loss of relevant evidence and witness testimony and may impair the College’s ability to enforce this Policy. Where the accused student is a degree candidate, it is the responsibility of the complainant to consult with the Dean’s Office concerning the accused student’s intended date of graduation and to file a complaint in a timely manner where personal jurisdiction over the accused student would otherwise be lost pursuant to Section II.A. above. The conferral of a degree may be deferred until proper resolution of any Sexual Misconduct charges, provided that a hearing opportunity will be scheduled for the earliest practicable date that may reasonably accommodate the parties and their witnesses.

C. Retaliation. It is a violation of College policy to retaliate against any person making a complaint of Sexual Misconduct or against any person cooperating in the investigation of (including testifying as a witness to) any allegation of Sexual Misconduct. For these purposes, “retaliation” includes intimidation, threats, harassment, and other adverse action threatened or taken against any such complainant or third party. Retaliation should be reported promptly to the Dean of Students and may result in disciplinary action independent of the sanction or interim measures imposed in response to the underlying allegations of Sexual Misconduct.

D. Other Related Misconduct. In accordance with this Policy, the Sexual Misconduct Board is empowered to hear allegations of, and to impose sanctions for, Sexual Misconduct and any violations of the College’s Standards of Conduct directly related to the alleged Sexual Misconduct or any alleged violations of this Policy. Such related misconduct may include, without limitation, violations of the rules of privacy as articulated herein, violations of the Dean’s directive(s) discussed in Section III.D, below, and/or violations of other Standards of Conduct that occurred in the course of the alleged Sexual Misconduct. It is not the practice of the College to pursue disciplinary action against a complainant or witness for his or her improper use of alcohol or drugs (underage drinking), provided that such student is acting in good faith as a complainant or witness to the events of the alleged Sexual Misconduct.
College students, who appear before the Sexual Misconduct Board, whether as parties to the proceedings or as witnesses, are expected to provide truthful testimony in accordance with the statement on Student Rights and Responsibilities in the Student Handbook.

E. Effect of Criminal Proceedings. Because Sexual Misconduct may constitute both a violation of College policy and criminal activity, the College encourages students to report alleged Sexual Misconduct promptly to local law enforcement agencies. Criminal investigations may be useful in the gathering of relevant evidence, particularly forensic evidence. Because the standards for finding a violation of criminal law are different from the standards for finding a violation of this Policy, criminal investigations or reports are not determinative of whether Sexual Misconduct, for purposes of this Policy, has occurred. In other words, conduct may constitute Sexual Misconduct under this Policy even if law enforcement agencies lack sufficient evidence of a crime and therefore decline to prosecute. In such cases, the complainant may not initially understand the results of the criminal investigation, the nature of criminal procedure, or the grounds for the law enforcement decision not to prosecute. The complainant in such cases may seek assistance from the Dean in seeking and attending a meeting with the local prosecutor to gain an understanding of the decision to decline a prosecution.

The filing of a complaint of Sexual Misconduct under this Policy is independent of any criminal investigation or proceeding, and (except that the College’s investigation may be delayed temporarily while the criminal investigators are gathering evidence) the College will not wait for the conclusion of any criminal investigation or proceedings to commence its own investigation and take interim measures to protect the complainant and the College community, if necessary, as described in Section III.D, below.

III. The Process: Initial Steps

A. Intake Meeting with Complainant. Upon receipt of notice of any allegation of Sexual Misconduct, the Dean will first schedule an individual intake meeting with the complainant in order to provide to the complainant a general understanding of this Policy and to identify forms of support or immediate interventions available to the complainant. The intake meeting may also involve a discussion of any accommodations that may be appropriate concerning the complainant’s academic or College employment arrangements.

B. Complainant Wishes to Pursue Formal or Informal Resolution. At the initial intake meeting with the complainant, the Dean will seek to determine how the complainant wishes to proceed, i.e., whether the complainant wishes to pursue Formal Resolution, Informal Resolution or does not wish to pursue resolution of any kind. If the complainant wishes to proceed with either Formal or Informal Resolution, the Dean will determine the name of the accused student and the date, location and nature of the alleged Sexual Misconduct and will schedule an individual intake meeting with the accused student in order to provide to the accused student a general understanding of this Policy and to identify forms of support or immediate interventions available to the accused student.

If the complainant wishes to proceed with Formal Resolution, the Dean will promptly prepare and forward a formal complaint to the Investigators for investigation, in accordance with Section IV.C, below. The formal complaint will set forth the name of the accused student and the date, location and nature of the alleged Sexual Misconduct.

If the complainant wishes to proceed with Informal Resolution, the Dean will promptly refer the complainant to the Sexual Misconduct Board Chair to initiate Informal Resolution proceedings in accordance with Section V, below.

C. Complainant Does not Wish to Pursue Resolution or Requests Confidentiality. If the complainant does not wish to pursue Formal or Informal Resolution and/or requests that his or her complaint remain confidential, Title IX nevertheless requires the College to investigate and take reasonable action in response to the complainant’s information. The Dean will inform the complainant, however, that the College’s ability to respond may be limited. The Dean may conduct a preliminary investigation into the alleged Sexual Misconduct and may weigh the complainant’s request(s) against the following factors: the seriousness of the alleged Sexual Misconduct, whether there have been other complaints of Sexual Misconduct against the same accused student, and the accused student’s right to receive information about the allegations if the information is maintained by the College as an “education record” under FERPA. The Dean will inform the complainant if the College cannot ensure confidentiality. Even if the College cannot take disciplinary action against the accused student because the complainant insists on confidentiality or that the complaint not be resolved, the Dean reserves the authority to undertake an appropriate inquiry, issue a “nocontact” order, and take other reasonably necessary measures, including the interim measures described in Section III.D, below.

D. Interim Measures. In all complaints of alleged Sexual Misconduct, regardless of whether the complainant wishes to pursue Formal Resolution, Informal Resolution or no resolution of any kind, the College will undertake an appropriate inquiry and take such prompt and effective action as is reasonably practicable under the circumstances to support and protect the complainant, including taking appropriate interim steps before the final outcome of the investigation and hearing, if any. Accordingly, at or after the intake meeting, the Dean may impose a “nocontact” order, which typically will include a directive that the parties refrain from having contact with one another, directly or through proxies, whether in person or via electronic means, pending the investigation and, if applicable, the hearing. The Dean, as Title IX Coordinator, also may take any further protective action that he or she deems appropriate concerning the interaction of the parties pending the hearing, if any. When taking steps to separate the complainant and the accused student, the Dean will seek to minimize unnecessary or unreasonable burdens on either party. Violation(s) of the Dean’s directive and/or protective actions will constitute related offenses that may lead to additional disciplinary action.

IV. Formal Resolution

A complainant may elect to pursue a Formal Resolution, which involves a hearing before a panel of the Sexual Misconduct Board, as more particularly described in this section. Such a hearing is also referred to as “Formal Resolution.”
A. The Sexual Misconduct Board. The Sexual Misconduct Board (or the "Board") is a standing committee composed of faculty and staff appointed by the Vice President, who also appoints the Board Chair. The Board Chair will ensure that all Board members receive annual training in their responsibilities that draws on professional and expert resources.

B. The Hearing Panel. Formal Resolution involves a hearing before a panel (the "Panel") of at least three College faculty and/or staff who are members of the Board. The Board Chair will select the Panel and will either serve as the presiding chair or will appoint the presiding chair (or, if the Board Chair is unavailable or otherwise unable to serve, the Vice President will select the Panel and a presiding chair).

C. Investigation. When the complainant indicates a desire to pursue Formal Resolution, the Dean will prepare and forward the complaint to the Vice President's Office for an investigation by such person or persons (the "Investigators") designated by the Vice President. The Investigators are typically members of the College's Threat Assessment Team (TAT) whom have received annual training that draws on professional and expert resources. The Investigators are neutral fact-finders, who, during the course of the investigation, typically conduct interviews with the complainant, the accused student, and each third-party witness (including expert witnesses, where applicable); visit and take photographs at each relevant site; and, where applicable, coordinate with law enforcement agencies to collect and preserve relevant evidence. The completed investigative report (the "Investigative Report") includes, among other things, summaries of interviews with the complainant, the accused student, and each third-party witness; summaries of interviews with expert witnesses, where applicable; photographs of the relevant site(s) and related logs; other photographic, electronic and forensic evidence; and a detailed written analysis of the events in question. A typical investigation will be completed within sixty (60) days, if not sooner. The Investigative Report will be distributed, concurrently, to both of the parties and to the Dean. If a hearing is held, the Board Chair and the Panel will also be provided with a copy of the Investigative Report.

D. Granting/Denying a Hearing. The Investigators will determine whether or not there is good cause to grant a hearing. If the Investigators determine that a hearing should be granted, notice of that determination will be delivered, concurrently, to both parties and to the Dean. The Investigators may specify which alleged violations of this Policy (i.e., which type or types of Sexual Misconduct) and, if applicable, which other, related alleged misconduct (as described in Section II. D, above) will go forward for a hearing. Concurrently with the delivery of the Investigators' notice of the determination that a hearing should be granted, the Investigators may, where the alleged Sexual Misconduct is sufficiently serious in their reasonable discretion, cause a transcript to be placed on the accused student's transcript pending final resolution of the complaint.

A complainant whose request for a hearing is denied, and an accused student whose transcripts are subject to a hold, each may appeal that decision to the Vice President, whose decision will be final.

E. Complainant Changes Election to Informal Resolution: Accused Student Elects to Accept Responsibility. After reviewing the Investigative Report, the complainant may decide to elect Informal Resolution instead of Formal Resolution by making such request to the Dean prior to the hearing date. At any time prior to the hearing, the accused student may elect to acknowledge his or her actions and take responsibility for the alleged Sexual Misconduct. In such cases, the Board Chair will propose a resolution to the complaint and a sanction. If both the complainant and the accused student agree to such proposed sanction, the complaint is resolved without a hearing and without any further rights of appeal by either party.

F. Notice of Hearing. Challenges to Panel. Delivery of Notice. If a hearing is granted by the Investigators (or by the Vice President, on appeal), the Board Chair will commence the Formal Resolution process by providing written notice to both parties (the "Notice of Hearing") stating: (1) the date, time, and place of the pre-hearing meeting at which preliminary matters will be discussed, as more fully addressed in Section IV.H, below, and (2) the names of the Board members selected to serve as the Panel. A party wishing to challenge the participation of any Panel member must notify the Board Chair, in writing, within ten (10) calendar days of receipt of the Notice of Hearing, stating the specific reason(s) for the objection. Failure to do so will constitute a waiver of any objection to the composition of the Panel. The Chair will determine whether the challenge has merit and reserves discretion to make changes in the Panel composition at any time. The Notice of Hearing will be delivered, at the Board Chair's discretion, by e-mail or in person, and will be considered effective immediately upon receipt. The hearing will take place promptly following delivery of the Notice of Hearing. The parties are expected to cooperate in the scheduling of the hearing. If either party fails to appear at the scheduled hearing, the Board Chair may postpone the proceedings or direct that the Panel proceed and determine the complaint on the basis of the Investigative Report and any other available information, provided the absent party was duly notified of the scheduled hearing date, as outlined in this section.

G. Advisors to the Parties. Both the complainant and the accused student may have advisors present to support and assist them during the prehearing, hearing, and appeal stages of the Formal Resolution process. The names of advisors attending the pre-hearing, hearing or appeal stages must be submitted to the Board Chair at least two calendar days prior to the scheduled proceedings. An advisor may not direct questions to the Panel or witnesses at the hearing but may consult with the student that he or she is assisting. The Board Chair will not allow an advisor's presence to inhibit the parties' sharing of information or the conduct of the hearing.

H. Hearing Procedures.

1. Pre-Hearing Submissions. The parties will provide the Board Chair (or the Panel’s presiding officer, hereinafter included within the term "Chair") with a list of witnesses they propose to call and copies of documents and a description of any other information they propose to present at the hearing on or
before a date set by the Chair. Evidence of the complainant’s past sexual history will not be permitted at the hearing unless it is relevant to the complaint. The Chair will provide each party with a copy of the list of witnesses and identification or copies of documents or other information submitted by each party. In the absence of good cause, as determined by the Chair in his or her sole discretion, the parties may not introduce witnesses, documents, or other information at the hearing that were not provided to the Chair by this deadline. The parties are also responsible for the attendance of their witnesses at the hearing.

2. Pre-Hearing Meeting and Determination of Complaint and Witnesses.

The Chair will schedule a pre-hearing meeting prior to the hearing date. At the meeting, the Chair will review hearing procedures with the parties, separately or jointly, at the discretion of the Chair. The Chair will also review the complaint of alleged Sexual Misconduct (and related misconduct, if applicable) and will review the parties’ respective lists of proposed witnesses to assist them in eliminating redundant information. The College reserves the right, through the Chair, to add to or modify the alleged violations specified by the Investigators, pursuant to Section IV.D, above, at the pre-hearing meeting and (b) to add witnesses to the witness lists at the pre-hearing meeting and/or at the hearing.

3. Pre-Hearing Discussion.

Once a Board member has been named to a Panel, he or she may not publicly or privately discuss the merits of the complaint with anyone not involved in the proceedings, with the parties themselves, or with anyone acting on the behalf of the parties. The Chair will provide the panelists with a copy of the Notice of Hearing, the Investigative Report, and the list of witnesses submitted by the parties with instruction to avoid any public or private discussion of the merits of the complaint.

4. Legal Counsel.

Legal counsel may be present at the hearing on behalf of either party. Such counsel may privately consult with and advise the parties during the proceeding but may not examine witnesses or otherwise directly participate on behalf of either party.

5. Panel’s Counsel.

The Chair and Panel may seek advice from the Virginia Community College System Counsel throughout the hearing process on questions of law and procedure; however, factual determinations are the domain of the Panel.


The hearing will not follow a courtroom model, and formal rules of evidence will not be observed. Accordingly, for example, the parties may elect to rely upon the statements of witnesses contained in the Investigative Report if such witnesses are unavailable to attend the hearing. The Chair will determine the order of the witnesses and resolve any questions of procedure arising during the hearing. The parties are responsible for ensuring that their proposed witnesses are present. Members of the Panel will review in advance of the hearing all the written materials provided to them by the Chair in accordance with Section IV.H.1, above. The parties will have received or been provided the opportunity to review and copy these materials during earlier stages of the prehearing process. The parties will be expected not to repeat undisputed details or non-material circumstances that would merely duplicate information contained in the Investigative Report or in other written materials. Only the Chair and the Panel may question the individual parties and any witnesses, unless permission is granted by the Chair to modify the questioning process. Both parties or their advisors may ask the Chair to pose additional questions or inquire further into specific matters by submitting these requests in writing or orally, at the discretion of the Chair. If necessary, a brief break may be granted to allow both parties an opportunity to prepare and submit such requests. The Chair is empowered to disallow or reframe any questions that are irrelevant or redundant. After all witnesses have been questioned, each party may make a closing statement and request a short recess to prepare it. If the Panel determines that unresolved issues exist that would be clarified by the presentation of additional information, the Chair may suspend the hearing and reconvene it in a timely manner to receive such additional information. A delay may not be based on the failure of witnesses to appear without good cause or on the proposed introduction of documents or other information that should have been presented at the pre-hearing meeting.

7. Testimony or Participation by the Accused.

The accused student has the option not to testify; however, the exercise of that option will not preclude the Panel from proceeding and determining the complaint on the basis of the Investigative Report and other available information. In addition, as indicated in Section IV.F, above, if the accused student fails to appear at the hearing after being duly notified of its place and time, the Chair may postpone the proceedings or direct the Panel proceed and determine the complaint on the basis of the Investigative Report and other available information.

8. Testimony by Closed-circuit Technology.

Upon timely request by a party or witness, the College may be able to provide for testimony by closed-circuit technology in appropriate circumstances, including where parties or witnesses are otherwise unable to participate in the hearing. The availability of testimony by closed-circuit technology will be at the sole discretion of the Chair.

9. Recording.

The Chair will arrange for the hearing to be recorded and may arrange for the preparation of any transcript of the recording that he or she deems appropriate or which a party requests (upon prompt payment by the requester of the transcription fee). Such recording will be arranged through the Dean’s Office.

10. Standard of Proof.

The Department of Education’s Office of Civil Rights has interpreted Title IX to require schools to evaluate evidence of alleged Sexual Misconduct under a “preponderance of the evidence” standard, and that is the standard adopted by this Policy. A preponderance of the evidence means that the information shows it is “more likely than not” that the accused student violated this Policy. In the context of a hearing hereunder, the accused student will be found to be responsible for the alleged Sexual Misconduct if the Panel, by a unanimous vote, concludes that such Sexual Misconduct more likely than not occurred based upon careful review of all information presented. In making its determination, the Panel shall carefully consider all of the evidence presented and follow the procedures stated in this
Policy in order to ensure as fair a hearing as possible for all parties.

11. Impact Statement. If the Panel determines that the accused student is responsible for Sexual Misconduct, i.e., that the Sexual Misconduct more likely than not occurred, the complainant may present the Panel with a statement recommending a sanction (the “Impact Statement”). The responsible student will be provided an opportunity to respond to the Impact Statement. The Panel is not bound by these statements in determining a sanction. Witnesses other than the parties normally are not permitted at the Impact Statement phase of the hearing; however, the Chair reserves discretion to permit the presence of other persons.

12. Sanction. The Panel is required to consider suspending or dismissing any student found responsible for Sexual Misconduct; however, the Panel may impose any sanction that it finds to be fair and proportionate to the violation. In determining an appropriate sanction, the Panel may consider any record of past violations of the Standards of Conduct, as well as the nature and severity of such past violation(s). The Panel will also consider, as part of its deliberations, whether the sanction will (a) bring an end to the violation in question, (b) reasonably prevent a recurrence of a similar violation, and (c) remedy the effects of the violation on the complainant and the College community. The sanction decision will be made by the Panel by majority vote. Any sanction imposed will be explained or supported in the written decision of the Panel.

13. Decision. The decision of the Panel, including the sanction, if applicable, will be announced to both parties, concurrently, by the Chair at the conclusion of the hearing. In addition, the Chair will provide a copy of the Final Outcome Letter, described in Section IV.H.17, below, to both parties, concurrently, and to the Dean and the Vice President, within ten (10) calendar days following the conclusion of the hearing (or at another time as the Chair may for good cause determine).

14. Appeals. Either party may appeal the Panel’s decision to the Vice President by notifying the Vice President in writing within fourteen (14) calendar days of the date of the Panel’s decision.

15. Effective Date of Sanction. Sanctions imposed by the Panel are not effective until the resolution of any timely appeal of the decision to the Vice President. However, if advisable to protect the welfare of the complainant or the College community, the Panel may determine that any probation, suspension, or expulsion be effective immediately and continue in effect until such time as the Vice President may otherwise determine. The Vice President may suspend the determination pending exhaustion of any appeals by the accused student pursuant to Section IV.H.14, above; may allow the accused student to attend classes or to engage in other activity on a supervised or monitored basis; or may make such other modifications to the determination as may be advisable in the sole discretion of the Vice President. The Vice President’s decision may not be appealed.

16. Transcript Notation in Cases of Suspension or Expulsion. If the Panel imposes a sanction of suspension or expulsion, then, following exhaustion of any appeals by the accused student pursuant to Section IV.H.14, above, the Board Chair will notify the College Registrar to place a notation on the student’s transcript reading “Disciplinary Suspension” or “Disciplinary Dismissal,” as the case may be.

17. Privacy of the Hearing Process. Final Outcome Letter. In order to comply with FERPA and Title IX and to provide an orderly process for the presentation and consideration of relevant information without undue intimidation or pressure, the hearing process is not open to the general public. Accordingly, documents prepared in anticipation of the hearing (including the Investigative Report, the Notice of Hearing, and the pre-hearing submissions referenced in Section IV.H.1, above); documents, testimony, or other information introduced at the hearing; and any transcript of the hearing itself may not be disclosed outside of the hearing proceedings, except as may be required or authorized by law.

In addition to complying with Title IX and FERPA, the College is required to comply with the federal Clery Act. Under the Clery Act, both the complainant and the accused student must be informed of the hearing outcome, and the College may not impose any limitations on the re-disclosure of this information. Accordingly, following the hearing, the Panel will issue a written decision letter (the “Final Outcome Letter”), concurrently, to both the accused student and the complainant. The Final Outcome Letter will set forth, as required by the Clery Act, the name of the accused student; the violation(s) of this Policy for which the accused student was found responsible, if any; any essential findings supporting the Panel’s decision on the issue of responsibility; and the sanction imposed, if any. College policy neither encourages nor discourages the further disclosure of the Final Outcome Letter by either the complainant or the accused student. The College acknowledges that sharing the Final Outcome Letter with others, including family, friends, legal counsel, mental health professionals, and sexual assault advocates or victims, may be a critically important part of a student’s healing process.

V. Informal Resolution

A complainant who wishes to file a formal complaint with the Dean’s Office but who does not wish to pursue Formal Resolution may request a less formal proceeding, known as “Informal Resolution,” as more particularly described in this section.

Although less formal than Formal Resolution, Informal Resolution is an appropriate resolution process; it is not mediation. The accused student is expected to attend the Informal Resolution proceeding but is not required to participate.

A. Purpose of Informal Resolution. Informal Resolution provides an opportunity for the complainant to confront the accused student in the presence of and facilitated by a presiding officer, as described in Section V.B, below, and to communicate his or her feelings and perceptions regarding the incident, the impact of the incident, and his or her wishes and expectations regarding protection in the future. The accused student will have an opportunity to respond.

B. Advisors, Presiding Officer. The complainant and the accused student each may bring an advisor to the Informal
Resolutions. Advisors are assigned and subject to the same restrictions set forth for advisors in Formal Resolution, Section IV.G, outlined above. The Dean of Students will preside over the Informal Resolution.

C. Informal Resolution Where Accused Student Acknowledges Responsibility. If, during the course of the Informal Resolution, the accused student elects to acknowledge his or her actions and take responsibility for the alleged Sexual Misconduct, the Informal Resolution will be concluded and the Dean will propose a sanction. If both the complainant and the accused student agree to such proposed sanction, the complaint will be resolved without any further rights of appeal by either party. If either the complainant or the accused student objects to such proposed sanction, a hearing before the Board will be convened for the exclusive purpose of determining a sanction, which determination is subject to appeal pursuant to Section IV.H.14 hereof. For purposes of this sanction hearing, all of the other provisions of this Policy relating to the imposition of a sanction for Sexual Misconduct shall apply (including, for example, the provision for an Impact Statement and the provisions governing the effective date of the sanction).

D. Informal Resolution Where Accused Student Contest Responsibility. If the accused student contests the complaint of alleged Sexual Misconduct, the Dean may nevertheless impose a protective order agreed upon by the parties, or (with or without such agreement) based on information derived from the Informal Resolution proceedings, taken together with any other relevant information known to the College at the time of the Informal Resolution.

E. Election of Formal Resolution. The College or the complainant may, at any time prior to the conclusion of the Informal Resolution, elect to end such proceedings and initiate Formal Resolution instead. In such cases, statements or disclosures made by the parties in the course of the Informal Resolution may be considered in the subsequent Formal Resolution.

F. Privacy of Informal Resolution. In order to promote honest, direct communication, information disclosed during Informal Resolution must remain private while the Informal Resolution is pending, except where disclosure may be required by law or authorized in connection with duties on behalf of the College.

Amendments
This Policy may be amended, in writing, by the President or the President’s designee at any time.

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 mental retardation. 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
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 a term of imprisonment ranging 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 twelve months and a fine up to $2,500, either or both.
2. Possession of a controlled substance classified in Schedule III 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 twelve months 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 thirty years and a fine up to $2,500, either or both.
7. Possession of a 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 marijuana, upon conviction, exposes the violator to a misdemeanor conviction for which the punishment is confinement in jail for up to thirty days and a fine up to $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.
9. 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.

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
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 (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 vice president of Student Affairs. The VP, 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 for student offenders 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 control 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 Learning Resource Centers. 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. Sexual abuses and other 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, Sexual Assault, and Sexual Harassment defined 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 Affairs 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 Division of Student Affairs. 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.

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 Affairs, 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.

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 Student 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 case, if you need to report emergency information, the following locations have phones that will work:

- **Chester** - Nicholas Student 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, Blackberrys, PDAs – 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 Student 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 Student Center – N102, N102a  
Trailers near Bird – Bird Hall, B102, B104, B116  
Trailers near Nicholas – Nicholas Student 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)
**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 Chief 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

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**First Aid Kits**
- **Chester Campus**
  - Moyar Hall – security officer’s desk
  - Nicholas Student Center – security officer’s desk
- **Midlothian Campus**
  - Administration Building – Lobby (security officer’s desk)

**Key People to Contact**
- **Security Staff**
  - Chester Campus: Nicholas Student 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
General information

ON-CAMPUS STUDENT INFORMATION

Piano
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.

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.

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ON-CAMPUS STUDENT INFORMATION

Parking
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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 Student 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 2 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 to visit a campus from coordinator of student activities. The coordinator reserve the right to determine the time, manner and place of such visitations. Recruiters interested in visiting campus should email acarpenter@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.
Programs of Study

TRANSFER DEGREES

Associate of Science Degrees

• Business Administration
  Paralegal Specialization
• Engineering
• General Studies
  Logistics Specialization
  Mass Communications
  Specialization (pending approval)
  Music Specialization (pending approval)
  Psychology Specialization
  Science Specialization†
  Secondary Teacher Education
  Specialization in Mathematics and Science†
  Teacher Education Specialization
  Elementary (K-6)
  Theatre Arts Specialization (pending approval)
• Information Systems†

Associate of Arts Degree

• Liberal Arts
  Communications Specialization
  Music Specialization
  Secondary Teacher Education
  Specialization in English
  Secondary Teacher Education
  Specialization in History
  Theater Arts Specialization

ASSOCIATE OF APPLIED ARTS DEGREES

• Visual Arts
  Film Specialization
  Photography Specialization
  Visual Communications
  Specialization

ASSOCIATE OF APPLIED SCIENCE DEGREES

• Accounting
• Architectural Engineering Technology†
• Business Management
• Early Childhood Development
  Teacher Assistant Specialization
• 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†
• Police Science/Criminal Justice
  (name change pending approval)
  Homeland Security Specialization
• 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†
• Allied Health Preparation,
  Pre-Funeral Services†
• Allied Health Preparation,
  Pre-Nursing†
• Athletic Coaching
• Basic Precision Machining
  Technology†
• Bereavement and Grief Counseling
• Business Information Management†
• Child Care Management
• Cisco Network†
• Civil Engineering Computer-Aided
  Drafting*†
• Computer-Aided Drafting*†
• Computer Applications†
• Computer Numerical Control*†
• Cyber Security† (pending approval)
• Early Childhood*
• Electricity*†
• Emergency Medical Services
  – Advanced Emergency Medical
  Technician† (pending approval)
• Emergency Medical Services
  – Intermediate†
• Geographic Information Systems*†
• Heating and Air Conditioning†
• Human Services Administration
  and Supervision
• Industrial Electricity†
• Mechanical Maintenance†
• Museum Studies* (pending approval)
• Network Support†
• Paralegal Studies
• Program Development†
• Residential Electricity†
• Small Business Management
• Substance Abuse Assistant
• Supervision
• Surveying*†
• Web Design
• Welding†

* Programs not eligible for financial aid
† Programs related to science, technology, engineering, mathematics and health (STEM-H)
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.)

**Program Curriculum**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
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<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>See Note 3.</td>
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<tr>
<td>MTH 163 Precalculus I</td>
<td>3</td>
<td></td>
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<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
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<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>
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<tbody>
<tr>
<td>ENG 112 College Composition II</td>
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<td></td>
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<tr>
<td>MTH 270 Applied Calculus</td>
<td>3</td>
<td></td>
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<tr>
<td>History or Political Science Elective</td>
<td>3</td>
<td>See Note 5.</td>
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<tr>
<td>Laboratory Science Elective</td>
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<td>See Note 4.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
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<tr>
<th>3rd Semester</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECO 201 Principles of Macroeconomics</td>
<td>3</td>
<td></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>
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<tr>
<td><strong>Total Credits</strong></td>
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<th>4th Semester</th>
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<tr>
<td>ACC 212 Principles of Accounting II</td>
<td>3</td>
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<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></td>
</tr>
<tr>
<td>ECO 202 Principles of Microeconomics</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>.</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</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. 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. Students with good computer skills may seek to satisfy this requirement by CLEP.
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, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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 103, 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 placements 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></td>
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</tr>
<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>
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<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<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>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>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>12</strong></td>
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<tr>
<td>3rd Semester</td>
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</tr>
<tr>
<td>BIO 101 General Biology I</td>
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<td>LGL 126 Legal Writing</td>
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<tr>
<td>LGL Elective</td>
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<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>
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<td>See Note 1.</td>
</tr>
<tr>
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<td>4th Semester</td>
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<tr>
<td>BIO 102 General Biology II</td>
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<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>
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</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.)

**Program Curriculum**

**1st Semester**
- CHM 111 College Chemistry I \(4\) Credits
- EGR 120 Introduction to Engineering \(2\)
- ENG 111 College Composition I \(3\)
- MTH 173 Calculus with Analytical Geometry I \(5\)
- SDV 100 College Success Skills \(1\)
- Humanities Elective \(3\)
- Total Credits \(18\)

**2nd Semester**
- EGR 124 Introduction to Engineering and Engineering Methods or CHM 112 College Chemistry II \(3-4\)
- EGR 126 Computer Programming for Engineers \(3\)
- EGR 140 Engineering Mechanics—Statics \(3\)
- ENG 112 College Composition II \(3\)
- MTH 174 Calculus with Analytical Geometry II \(5\)
- Total Credits \(17-18\)

**3rd Semester**
- EGR 246 Mechanics of Materials \(3\)
- EGR 248 Thermodynamics for Engineers \(3\)
- HLT/PED Health or Physical Education \(1\)
- MTH 277 Vector Calculus \(4\)
- PHY 241 General University Physics I \(4\)
- Social/Behavioral Science Elective \(3\)
- Total Credits \(18\)

**4th Semester**
- EGR 245 Engineering Mechanics - Dynamics \(3\)
- MTH 279 Ordinary Differential Equations \(4\)
- PHY 242 General University Physics II \(4\)
- Humanities Elective \(3\)
- Social/Behavioral Science Elective \(3\)
- Total Credits \(17\)

**Total Credits For Program** \(70-71\)

**Notes and Additional Curriculum Options**

1. MTH 164 or the equivalent is the prerequisite 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, PLS, 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/humaniteselectives) 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 3.5 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 placements 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>
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<tbody>
<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 158 College Algebra or</td>
<td>3</td>
</tr>
<tr>
<td>MTH 163 Precalculus I</td>
<td></td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
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<td>History Elective</td>
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<tr>
<td>Laboratory Science Elective</td>
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2nd Semester

<table>
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<tr>
<th>Course Options</th>
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<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
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<tr>
<td>History Elective</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
<td>4</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
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3rd Semester

<table>
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<tr>
<td>Transfer Elective</td>
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<tr>
<td>Transfer Elective</td>
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</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
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<tr>
<td>Literature Elective</td>
<td>3</td>
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4th Semester

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<td>Transfer Elective</td>
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<td>Humanities Elective</td>
<td>3</td>
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<tr>
<td>Literature Elective</td>
<td>3</td>
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<tr>
<td>Physical Education/Health Elective</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>

**Total Credits For Program** 61

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. Students in the science, technology, engineering, and mathematics (STEM) track should take two math classes, MTH 163 and higher, and consult with their advisor.
2. 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.
3. 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.
4. The literature requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
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, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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).
6. Students with good computer skills may seek to satisfy this requirement by CLEP.
7. 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 placements 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
- **IND 116 Applied Technology** 3 credits
- **ENG 111 College Composition I** 3 credits
- **History Elective** 3 credits
- **MTH 163 Precalculus I** 3 credits
  - MTH 164, MTH 170, MTH 173. See Note 4.
- **SDV 100 College Success Skills** 1 credit
- **Laboratory Science Elective** 4 credits
  - See Note 5.
- **Total Credits** 17

#### 2nd Semester
- **CON 100 Shaping Business Arrangements** 3 credits
- **ENG 112 College Composition II** 3 credits
- **MTH 240 Statistics** 3 credits
- **Laboratory Science Elective** 4 credits
  - See Note 5.
- **Social/Behavioral Science Elective** 3 credits
  - See Note 3.
- **Total Credits** 16

#### 3rd Semester
- **Transfer Elective** 3 credits
- **BUS 208 Quality and Productivity Management** 3 credits
- **Literature Elective** 3 credits
  - See Note 2.
- **Humanities Elective** 3 credits
  - See Note 4.
- **Social/Behavioral Science Elective** 3 credits
  - See Note 3.
- **Total Credits** 15

#### 4th Semester
- **MTH 270 Applied Calculus** 3 credits
- **Transfer Elective** 3 credits
  - See Note 6.
- **CST 100 Principles of Public Speaking or CST 110 Introduction to Communications** 3 credits
- **Physical Education/Health Elective** 1 credit
- **BUS 234 Supply Chain Management** 3 credits
- **Total Credits** 13

**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, PLS, 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. 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. 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 105, NAS 125, NAS 130, PHY 101, PHY 102, 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 (pending approval)

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 placements 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>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><strong>16</strong></td>
<td></td>
</tr>
</tbody>
</table>

| 2nd Semester | |  |
| CST 114 Survey of Mass Media | 3 |  |
| ENG 112 College Composition II | 3 |  |
| MTH 240 Statistics | 3 | MTH 158, MTH 164, MTH 170, MTH 173. See Note 2. |
| History Elective | 3 | See Note 3. |
| Social/Behavioral Science Elective | 3 | See Note 4. |
| **Total Credits** | **15** |  |

| 3rd Semester | |  |
| MKT 221 Public Relations | 3 |  |
| PHI 220 Ethics | 3 |  |
| Transfer Elective | 3 | See www.jtcc.edu/transferelectives and Note 5. |
| Laboratory Science Elective | 4 |  |
| Literature Elective | 3 | See Note 7. |
| **Total Credits** | **16** |  |

| 4th Semester | |  |
| Transfer Elective | 3 | See www.jtcc.edu/transferelectives and Note 5. |
| Communication Studies and Theatre Elective | 3 | See Note 8. |
| Laboratory Science Elective | 4 | See Note 6. |
| Physical Education/Health Elective | 1 |  |
| Social/Behavioral Science Elective | 3 | See Note 4. |
| **Total Credits** | **14** |  |

| **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 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 115.
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, CHM 129, CHM 130, ENV 121, ENV 122, GEO 105, NAS 125, NAS 130, PHY 101, PHY 102, 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 (pending approval)

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 Curriculum

1st Semester  Credits  Standard Course Options
ENG 111 College Composition I  3  
ITE 115 Introduction to Computer Applications and Concepts  3  See Note 1.
MTH 158 College Algebra or MTH 163 Precalculus I  3  MTH 164, MTH 170, MTH 173. See Note 2.
MUS 101 Basic Musicianship I or MUS 111 Music Theory I  3  
SDV 100 College Success Skills  1  
History Elective  3  See Note 3.
Total Credits  16

2nd Semester  Credits  Standard Course Options
ENG 112 College Composition II  3  
MTH 240 Statistics  3  MTH 158, MTH 164, MTH 170, MTH 173. See Note 2.
MUS 102 Basic Musicianship II or MUS 112 Music Theory II  3  
History Elective  3  See Note 3.
Social/Behavioral Science Elective  3  See Note 4.
Total Credits  15

3rd Semester  Credits  Standard Course Options
Transfer Elective  3  See www.jtcc.edu/transferelectives and Note 5.
Laboratory Science Elective  4  See Note 6.
Literature Elective  3  See Note 7.
MUS 221 History of Music I  3  MUS 121, MUS 125, MUS 225
Social/Behavioral Science Elective  3  See Note 4.
Total Credits  16

4th Semester  Credits  Standard Course Options
Transfer Elective  3  See www.jtcc.edu/transferelectives and Note 5.
Laboratory Science Elective  4  See Note 6.
Music Elective  3  See Note 8.
Physical Education/Health Elective  1  
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, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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, 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 placements 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>
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</thead>
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<tr>
<td><strong>1st Semester</strong></td>
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<tr>
<td>ENG 111</td>
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<td>HIS 101, HIS 111</td>
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<td>MTH 158</td>
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<td>MTH 170, MTH 173. See Note 1.</td>
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<td>PSY 200/PSY 203</td>
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<td>HIS 122</td>
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<td>HIS 102, HIS 112</td>
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<td>MTH 240</td>
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<td>MTH 164, MTH 174. See Note 1.</td>
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<td>BIO 101</td>
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<td>BIO 110, CHM 111, PHY 101, PHY 201</td>
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<td>PSY 213</td>
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<tr>
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<td>See Note 3.</td>
</tr>
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**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. Students in the science, technology, engineering, and mathematics (STEM) track should take MTH 163, MTH 164, and MTH 173 to transfer.

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/humanitiesselectives) for a list of approved conceptual and applied humanities electives.

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

4. Students with good computer skills may seek to satisfy this requirement by CLEP.

5. Students should consult with their advisors regarding appropriate psychology (PSY) electives (PSY 100 will not count for this requirement).

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

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.)**

**Purpose**
This program is specifically designed for transfer into a science major at most four-year colleges. 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 Science. 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, forensic science, clinical lab science, pre-med, environmental science or geology.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placements 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. Many of the required courses will require that a student test out of or complete developmental courses prior to taking the course.

### Program Curriculum

#### 1st Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tr>
<td>CHM 111 College Chemistry I</td>
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<tr>
<td>ENG 111 College Composition I</td>
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<tr>
<td>Math Elective</td>
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<td>SDV 100 College Success Skills</td>
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#### 2nd Semester

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<tr>
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<td>Math Elective</td>
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<td>See Note 1.</td>
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<tr>
<td>History Elective</td>
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#### 3rd Semester

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<tr>
<td>BIO 101 General Biology I or</td>
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<td>PHY 201 General College Physics I or</td>
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<tr>
<td>PHY 241 University Physics I</td>
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<td>Laboratory Science or Advanced Math Elective</td>
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<td>3</td>
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<td>Literature Elective</td>
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<td>See Note 6.</td>
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#### 4th Semester

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<tr>
<td>BIO 102 General Biology II or</td>
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<tr>
<td>PHY 202 General College Physics II or</td>
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<tr>
<td>PHY 242 University Physics II</td>
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<td>Laboratory Science or Advanced Math Elective</td>
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<td>See Note 5.</td>
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<tr>
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<td>Humanities Elective</td>
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<td><strong>16</strong></td>
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</table>

#### Total Credits For Program

| Credits | 61 |

**Notes and Additional Curriculum Options**

1. 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. 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.

2. 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.

3. 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.

4. Students must complete one of the following lab sequences: BIO101/102, PHY201/202, or PHY241/242. In general, biology majors should choose BIO101/102. Students intending to major in biology or forensic science at VCU are strongly encouraged to substitute BIO101/102 for BIO101/102. Physics majors should complete PHY241/242.

5. Science students may choose from the following science/advanced math electives: BIO 101, BIO 102, BIO 205, BIO 206, BIO 256, CHM 241, CHM 245, PHY 201, PHY 202, PHY 241, PHY 242. In general, biology majors should choose PHY101/102. Please note that students cannot count both PHY201/202 and PHY241/242 toward their degree and that many of the listed courses have prerequisites. Students intending to major in geology can also use GOL 105 to count as a science elective. Physics majors should consider choosing the advanced math electives from the list above. With permission from the Division of Mathematics, Natural and Health Sciences, intended Health Science majors (Clinical Laboratory Science, Dental Hygiene, Radiation Science, Occupational Therapy, or related health sciences) may use BIO 141/BIO 142 or BIO 231/BIO 232 to count as a science elective. Please check with your advisor to plan out your classes.

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 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 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 placements 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

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<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tr>
<td>1st Semester</td>
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<td>CHM 111 College Chemistry I</td>
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<td>History Elective</td>
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<td>MTH 173 Calculus with Analytical Geometry I</td>
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<td>MTH 240 Statistics</td>
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<td>Lab Science or Mathematics Elective</td>
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<td>Literature Elective</td>
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<td>BIO 101, BIO 110, PHY 241. See Note 5.</td>
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<td>PHY 201 General College Physics I</td>
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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 MTH electives include MTH 277. Acceptable lab science electives include BIO 231, BIO 232, BIO 256, BIO 279, GOL 105, NAS 125 and NAS 130.
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 elective requirements 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>
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<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
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<tr>
<td>1st Semester</td>
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<tr>
<td>ENG 111 College Composition I</td>
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<tr>
<td>HIS 121 United States History I</td>
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<td>ITE 115 Introduction to Computer Applications and Concepts</td>
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<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
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<td>SDV 101 Orientation to Future Teachers</td>
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<td>Health/Physical Education Elective</td>
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| 2nd Semester | 15 | |
| 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 | 16 | |
| 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 | 16 | |
| 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 can also 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. 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
(pending approval)

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 placements 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>
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<tbody>
<tr>
<td>CST 131 Acting I</td>
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<td>ENG 111 College Composition I</td>
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<td>ITE 115 Introduction to Computer Applications and Concepts</td>
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<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
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<td>MTH 164, MTH 170, MTH 173. See Note 2.</td>
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<td>SDV 100 College Success Skills</td>
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<td>CST 132 Acting II</td>
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<td>MTH 240 Statistics</td>
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<td>MTH 158, MTH 164, MTH 170, MTH 173. See Note 2.</td>
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<tr>
<td>CST 160 Improvisation I</td>
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<td>Literature Elective</td>
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<td>CST 136 Theatre Workshop</td>
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<td>CST 145, CST 252</td>
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<td>CST 210 Theatre Aesthetics</td>
<td>3</td>
<td>CST 130, CST 231, CST 232</td>
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<tr>
<td>Transfer Elective</td>
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<td>See <a href="http://www.jtcc.edu/transferelectives">www.jtcc.edu/transferelectives</a> and Note 5.</td>
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<td>Laboratory Science Elective</td>
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<td>Physical Education/Health Elective</td>
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</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.
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, HES, 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, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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 placements 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>
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<tbody>
<tr>
<td>ACC 211 Principles of Accounting I</td>
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<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
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<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
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<td>MTH 163 Precalculus I</td>
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<td>SDV 100 College Success Skills</td>
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<td>Health/Physical Education Elective</td>
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<td>ENG 112 College Composition II</td>
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<tr>
<td>ITN 101 Introduction to Network Concepts</td>
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<td>ITP 100 Software Design</td>
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<td>MTH 164 Precalculus II</td>
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<td>MTH 270. See Note 5.</td>
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<th>3rd Semester</th>
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<tr>
<td>BIO 101 General Biology I</td>
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<td>CHM 111, PHY 201</td>
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<td>ITD 130 Database Fundamentals</td>
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<td>ITP 251 Systems Analysis and Design</td>
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<td>PSY 126 Psychology for Business and Industry</td>
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<th>4th Semester</th>
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<tr>
<td>BIO 102 General Biology II</td>
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<td>CHM 112, PHY 202</td>
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<tr>
<td>BUS 100 Introduction to Business</td>
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<td></td>
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<tr>
<td>CST 110 Introduction to Communication</td>
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<td>Humanities Elective</td>
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</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/humanitiesselectives) 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).
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 placements 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>
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<tbody>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
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<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
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<td>See Note 7.</td>
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<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
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<td>MTH 170, MTH 173</td>
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<td>Foreign Language (101)</td>
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<tr>
<td>ENG 112 College Composition II</td>
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<td>MTH 240 Statistics</td>
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<td>MTH 164, MTH 270, MTH 174</td>
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<td>Literature Elective</td>
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<td>Philosophy/Religion Elective</td>
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<th>4th Semester</th>
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<tr>
<td>Physical Education/Health Elective</td>
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<tr>
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**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, CHM 101, CHM 102, CHM 111, CHM 112, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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).
Transfer Degrees

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 placements 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.

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<td>CST 100</td>
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<td>MTH 158</td>
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<td>MTH 170, MTH 173</td>
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<tr>
<td>ENG 112</td>
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<td>MTH 240</td>
<td>3</td>
<td>MTH 164, MTH 270, MTH 174</td>
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<td>Foreign Language (102)</td>
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<td>History Elective</td>
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<tr>
<td>ITE 115</td>
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<td>See Note 6.</td>
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<tr>
<td>Physical Education/Health Elective</td>
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</table>

**Total Credits For Program**

| Credits | 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, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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 placements 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>
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<tbody>
<tr>
<td>ENG 111  College Composition I</td>
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<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
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<td>MUS 101  Basic Musicianship I</td>
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<td>SDV 100  College Success Skills</td>
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<td>Foreign Language (101)</td>
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<td>History Elective</td>
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2nd Semester

<table>
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<tr>
<td>ENG 112  College Composition II</td>
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<tr>
<td>MTH 240  Statistics</td>
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<td>MUS 102  Basic Musicianship II</td>
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<td>Foreign Language (102)</td>
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3rd Semester

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<td>Literature Elective</td>
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<td>Music Elective</td>
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4th Semester

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<td>Physical Education/Health Elective</td>
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<td>Social/Behavioral Science Elective</td>
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Total Credits For Program: 60

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, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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 placements 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>
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<tbody>
<tr>
<td>ENG 111 College Composition I</td>
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<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>
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<td>SDV 101 Orientation to Future Teachers</td>
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<td>Foreign Language (101)</td>
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<td>See Note 3.</td>
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<tr>
<td>ENG 112 College Composition II</td>
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<tr>
<td>HIS 121 United States History I</td>
<td>3</td>
<td>HIS 122</td>
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<tr>
<td>MTH 240 Statistics</td>
<td>3</td>
<td>MTH 164, MTH 270, MTH 173</td>
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<td>Foreign Language (102)</td>
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<th>3rd Semester</th>
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<tr>
<td>Laboratory Science Elective</td>
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<td>See Note 6 and Note 8.</td>
</tr>
<tr>
<td>EDU 200 Introduction to Teaching as a Profession</td>
<td>3</td>
<td>HIS 102, HIS 111, HIS 112. See Note 5.</td>
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<tr>
<td>HIS 101 History of Western Civilization</td>
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<tr>
<td>ENG 241 Survey of American Literature I</td>
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<td>ENG 242, ENG 243, ENG 244, ENG 251, ENG 252</td>
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<td>CST 100 Principles of Public Speaking</td>
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<td>CST 110, CST 115</td>
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<td>Philosophy/Religion Elective</td>
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**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 sciences 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, CHM 101, CHEM 102, CHEM 111, CHEM 112, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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, Secondary Teacher Education Specialization in History

### Associate of Arts (A.A.)

#### Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tbody>
<tr>
<td><strong>1st Semester</strong></td>
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</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
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<td>HIS 121 United States History I</td>
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<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
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<td>See Note 2.</td>
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<td>SDV 101 Orientation to Future Teachers</td>
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<td><strong>2nd Semester</strong></td>
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<td>ENG 112 College Composition II</td>
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<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
<td>ITE 200. See Note 1.</td>
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<tr>
<td>HIS 122 United States History II</td>
<td>3</td>
<td>HIS 101, HIS 102. See Note 4.</td>
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<td>MTH 240 Statistics</td>
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<td>MTH 164</td>
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<td>Foreign Language (102)</td>
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<td><strong>3rd Semester</strong></td>
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<td>Laboratory Science Elective</td>
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<td>See Notes 7 and 9.</td>
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<tr>
<td>ECO 201 Principles of Macroeconomics</td>
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<td>PLS 135, ECO 120, ECO 202. See Note 5.</td>
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<td>EDU 200 Introduction to Teaching as a Profession</td>
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<td>GEO 210 People and the Land: Cultural Geography</td>
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| 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. 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.
3. It is recommended that the history requirement include American History and History of Western Civilizations or History of World Civilizations.
4. ECO 120 may be used as a standard course option for some colleges and universities. Please consult with your transfer institution.
5. The literature elective requirement can be satisfied by any 200-level English literature course, exclusive of composition and creative writing courses.
6. Two different science disciplines are recommended and even required at some transfer institutions.
7. 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, SOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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 placements 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>
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<tbody>
<tr>
<td>CST 131 Acting I</td>
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<tr>
<td>ENG 111 College Composition I</td>
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<tr>
<td>MTH 158 College Algebra or MTH 163 Precalculus I</td>
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<td>MTH 170, MTH 173</td>
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<td>SDV 100 College Success Skills</td>
<td>1</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Foreign Language (101)</td>
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<td>See Note 3.</td>
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<tr>
<td>History Elective</td>
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<tr>
<td>CST 132 Acting II</td>
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<tr>
<td>ENG 112 College Composition II</td>
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<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 3.</td>
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<tr>
<td>History Elective</td>
<td>3</td>
<td>See Note 2.</td>
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<tr>
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<tr>
<td>CST 130 Introduction to the Theatre</td>
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<td>CST 195, CST 231, CST 232</td>
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<td>See Note 5.</td>
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<tbody>
<tr>
<td>CST 136 Theatre Workshop</td>
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<td>CST 145, CST 252</td>
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<td>Foreign Language (202)</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Laboratory Science Elective</td>
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<td>See Note 5.</td>
</tr>
<tr>
<td>Physical Education/Health Elective</td>
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<td>Social/Behavioral Science Elective</td>
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<td>See Note 6.</td>
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<td><strong>Total Credits</strong></td>
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</tbody>
</table>

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

Notes and Additional Curriculum Options
1. Students interested in pursuing a degree in theatre education should take SDV 101-Orientation to Theatre Arts.
2. 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.
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, CHM 129, CHM 130, ENV 121, ENV 122, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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 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.
### 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 placements 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
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<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
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<td>ART 101 History and Appreciation of Art I</td>
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<tr>
<td>ART 111 Introduction to the Arts I</td>
<td>3</td>
</tr>
<tr>
<td>ART 121 Drawing I</td>
<td>3</td>
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<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 100 College Success Skills</td>
<td>1</td>
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<tr>
<td><strong>Total Credits</strong></td>
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#### 2nd Semester
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<tr>
<td>ART 102 History and Appreciation of Art II</td>
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</tr>
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<td>ART 122 Drawing II</td>
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<td>ART 132 Fundamentals of Design II</td>
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<td>ART 133 Visual Arts Foundation</td>
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<td>ENG 112 College Composition II</td>
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<td>Health or Physical Education Elective</td>
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#### 3rd Semester
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<tr>
<td>General Elective</td>
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<td>Information Technology Elective</td>
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#### 4th Semester
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</tbody>
</table>

**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, GOL, MTH, NAS 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 placements 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>
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<th>Standard Course Options</th>
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<tr>
<td>ART 101 History and Appreciation of Art I</td>
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<td>CST 151 Film Appreciation I</td>
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<td>ART 121 Drawing I</td>
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<td>ART 131 Fundamentals of Design I</td>
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<td>ENG 111 College Composition I</td>
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<td>SDV 100 College Success Skills</td>
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<td>ART 102 History and Appreciation of Art II</td>
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<td>ART 132 Fundamentals of Design II</td>
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<td>ART 133 Visual Arts Foundation</td>
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<tr>
<td>Communication Studies and Theatre Elective</td>
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<td>PHT 150 Film Production I</td>
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<td>PHT 151 Film Production II</td>
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<td>PHT 274 Digital Film Editing and Post Production</td>
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**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, GOL, MTH, NAS 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 placements 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

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<thead>
<tr>
<th>Semester</th>
<th>Course Options</th>
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<tr>
<td><strong>1st Semester</strong></td>
<td>ART 101 History and Appreciation of Art I</td>
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<td>ART 111 Introduction to the Arts I</td>
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<td>ART 121 Drawing I</td>
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<td>ART 131 Fundamentals of Design I</td>
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<td>ENG 111 College Composition I</td>
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<td>ART 102 History and Appreciation of Art II</td>
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<td>ART 132 Fundamentals of Design II</td>
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<td>ENG 112 College Composition II</td>
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<td>PHT 164 Introduction to Digital Photography</td>
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<tr>
<td><strong>3rd Semester</strong></td>
<td>Communication Studies and Theatre Elective</td>
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<td>General Elective</td>
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<td>Health or Physical Education Elective</td>
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<td>PHT 110 History of Photography</td>
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<td>PHT 135 Electronic Darkroom</td>
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<td>PHT 221 Studio Lighting I</td>
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<td><strong>4th Semester</strong></td>
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<td>Mathematics/Science Elective</td>
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<td>PHT 264 Digital Photography II</td>
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<tr>
<td><strong>Total Credits For Program</strong></td>
<td></td>
<td><strong>65</strong></td>
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</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 mathematic/science elective requirement can be satisfied by courses with the following prefixes: BIO, CHM, GOL, MTH, NAS 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 or film 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 placements 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

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<thead>
<tr>
<th>Course Options</th>
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<tbody>
<tr>
<td>ART 101 History and Appreciation of Art I</td>
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<tr>
<td>ART 111 Introduction to the Arts I</td>
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</tr>
<tr>
<td>ART 121 Drawing I</td>
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<td>ART 131 Fundamentals of Design I</td>
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<tr>
<td>ENG 111 College Composition I</td>
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<td>SDV 100 College Success Skills</td>
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2nd Semester

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<td>ART 102 History and Appreciation of Art II</td>
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<td>ART 122 Drawing II</td>
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3rd Semester

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<td>ART 141 Typography I</td>
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<td>ART 217 Electronic Graphic Design I</td>
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<td>ART 250 History of Design</td>
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4th Semester

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</table>

**Total Credits For Program**  **65**

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 mathematic/science elective requirement can be satisfied by courses with the following prefixes: BIO, CHM, GOL, MTH, NAS 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 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).
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.
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 placements 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
AST 205 Business Communications 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).
Architectural Engineering Technology

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

Purpose
Building design and land development require a large number of professionals with a wide range of skills. This program prepares students for many of these careers, including architectural drafter, engineering drafter, computer-aided drafter, civil or surveying drafter, architectural engineering technologist, design assistant, specifications assistant and field inspector / contract administrator. Graduates will be able to: (1) using computer-aide drafting, produce a representative set of accurate working drawings for a house and a small commercial building; (2) apply principles of mechanical and electrical systems to the design of a building; (3) apply principles of mechanics to the design of building elements; (4) perform tests on materials such as concrete, metals and wood; (5) perform basic surveying operations; (6) write technical computer programs; (7) apply principles of sustainable design to buildings; (8) evaluate a building design using building codes and zoning regulations; and (9) use communication skills effectively in the work environment.

Program Requirements and Special Conditions
Students must meet JTCC admission requirements. Students must also complete placements 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

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<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>16</td>
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<tr>
<td>ARC 121 Architectural Drafting I</td>
<td>3</td>
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<tr>
<td>ARC 221 Architectural CAD Applications Software I</td>
<td>3</td>
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</tr>
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<td>ARC 258 Building Codes, Contract Documents and Professional Office Practices</td>
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<td>ENG 111 College Composition I</td>
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<td>MTH 163 Precalculus I</td>
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<td>2nd Semester</td>
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<td>ARC 122 Architectural Drafting II</td>
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<td>ARC 243 Environmental Systems</td>
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<td>ARC 222 Architectural CAD Application Software II</td>
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<td>MEC 270 Computations for Engineering Technology</td>
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<td>ARC 246 Materials and Methods of Construction</td>
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<tr>
<td>CIV 171 Surveying I</td>
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<td>MEC 131 Mechanics I – Statics for Engineering Technology</td>
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<td>ARC 232 Advanced Architectural Drafting II</td>
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<td>CST 100 Principles of Public Speaking</td>
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<td>Humanities Elective</td>
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<td>Social/Behavioral Science Elective</td>
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</table>

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).
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 placements 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

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<tr>
<th>Semester</th>
<th>Course Options</th>
<th>Credits</th>
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<tbody>
<tr>
<td>1st Semester</td>
<td>ACC 211 Principles of Accounting I</td>
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<td>BUS 100 Introduction to Business</td>
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<td>ENG 111 College Composition</td>
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<td></td>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
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<td>MTH 120 Introduction to Mathematics</td>
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<td>SDV 100 College Success Skills</td>
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<tr>
<td>2nd Semester</td>
<td>ACC 212 Principles of Accounting II</td>
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<td>BUS 125 Applied Business Mathematics</td>
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<td></td>
<td>BUS 200 Principles of Management</td>
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<td>ECO 120 Survey of Economics</td>
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<td>Philosophy or Religion Elective</td>
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<tr>
<td>3rd Semester</td>
<td>BUS 220 Introduction to Business Statistics</td>
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<td>BUS 241 Business Law I</td>
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<td>4th Semester</td>
<td>AST 205 Business Communications</td>
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<td>BUS 205 Human Resource Management</td>
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<td>BUS 266 Production and Operations Management</td>
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<td>MKT 100 Principles of Marketing</td>
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<td>Information Technology Restricted Elective</td>
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<td><strong>Total Credits For Program</strong></td>
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</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).
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 placements 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>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tbody>
<tr>
<td>CHD 119 Introduction to Reading Methods</td>
<td>3</td>
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<tr>
<td>CHD 120 Introduction to Early Childhood Education</td>
<td>3</td>
<td></td>
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<tr>
<td>CHD 145 Methods and Materials for Teaching Art, Music and Movement to Children</td>
<td>3</td>
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<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
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<tr>
<td>HLT 106 First Aid and Safety</td>
<td>2</td>
<td>See Note 5.</td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
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<tr>
<td>CHD 118 Methods and Materials in the Language Arts for Children</td>
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<tr>
<td>CHD 146 Methods and Materials for Teaching Math, Science and Social Studies to Children</td>
<td>3</td>
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<td>CHD 205 Guiding the Behavior of Children</td>
<td>3</td>
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<tr>
<td>CHD 215 Models of Early Childhood Education Programs</td>
<td>3</td>
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<tr>
<td>CHD 216 Early Childhood Programs, School, and Social Change</td>
<td>3</td>
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<td>ENG 112 College Composition II</td>
<td>3</td>
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<th>3rd Semester</th>
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<tr>
<td>CHD 165 Observation and Participation in Early Childhood/Primary Settings</td>
<td>3</td>
<td>See Notes 1 and 2.</td>
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<tr>
<td>CHD 210 Introduction to Exceptional Children</td>
<td>3</td>
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<tr>
<td>CHD 270 Administration of Childcare Programs</td>
<td>3</td>
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<tr>
<td>EDU 235 Health, Safety, and Nutrition Education</td>
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<tr>
<td>MTH 120 Introduction to Mathematics</td>
<td>3</td>
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<td>PSY 235 Child Psychology</td>
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<th>4th Semester</th>
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<tr>
<td>CHD 166 Infant and Toddler Programs</td>
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<td>CST 100 Principles of Public Speaking or CST 110 Introduction to Communication</td>
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<tr>
<td>CHD 265 Advanced Observation and Participation in Early Childhood/Primary Settings</td>
<td>3</td>
<td>See Notes 1 and 3.</td>
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<td>CHD 298 Seminar Portfolio Development</td>
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<td>Humanities Elective</td>
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<td>SOC 215 Sociology of the Family</td>
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</table>

**Total Credits For Program** | **67** |

**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
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/humanitiesselectives) 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 placements 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.

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**Program Curriculum**

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<tr>
<th>1st Semester</th>
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<tbody>
<tr>
<td>CHD 120 Introduction to Early Childhood Education</td>
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<tr>
<td>CHD 145 Methods and Materials for Teaching Art, Music and Movement to Children</td>
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<td>CST 100 Principles of Public Speaking or CST 110 Introduction to Communication</td>
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<td>HLT 106 First Aid and Safety</td>
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<td>SDV 101 Orientation to Education</td>
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<td>CHD 146 Methods and Materials for Teaching Math, Science and Social Studies</td>
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<td>CHD 205 Guiding the Behavior of Children</td>
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<td>CHD 210 Introduction to Exceptional Children</td>
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<td>CHD 216 Early Childhood Programs, School, and Social Change</td>
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<td>ENG 112 College Composition II</td>
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<td>ITE 295 Computers for Educators</td>
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<tr>
<td>CHD 119 Introduction to Reading Methods</td>
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<td>CHD 165 Observation and Participation in Early Childhood/Primary Settings</td>
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<td>EDU 200 Introduction to Teaching as a Profession</td>
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<td>MTH 170 Fundamentals Contemporary Math</td>
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<td>MTH 163</td>
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<td>MUS 121 Music Appreciation I</td>
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<td>ART 101, ART 102, HUM 201, HUM 202, PHI 101, PHI 102, PHI 111, REL 230, REL 231, REL 232</td>
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<td>CHD 298 Seminar and Portfolio Development Humanities Elective</td>
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<td>EDU 235 Health, Safety and Nutrition Education</td>
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<td>SOC 215 Sociology of the Family</td>
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<td>PSY 200/PSY 203, SOC 200</td>
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**Total Credits For Program** **66**

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continued
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/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. 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).
Emergency Medical Services – Paramedic (pending approval)

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

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tbody>
<tr>
<td>1st Semester</td>
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<tr>
<td>SDV 101 Orientation to Health Sciences</td>
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<td>BIO 141 Anatomy &amp; Physiology I</td>
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<td>EMS 111 Emergency Medical Technician – Basic</td>
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<td>EMS 112 and EMS 113</td>
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<td>EMS 120 Emergency Medical Technician – Basic Clinical</td>
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<td>HLT 143 Medical Terminology</td>
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<td>ENG 111 College Composition I</td>
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<td>EMS 151 Introduction to Advanced Life Support</td>
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<td>See Note 2.</td>
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<td>EMS 152 Advanced Medical Care</td>
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<td>EMS 153 Basic ECG Recognition</td>
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<td>EMS 170 ALS Internship I</td>
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<tr>
<td>BIO 142 Anatomy &amp; Physiology II</td>
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<td>EMS 154 ALS Cardiac Care</td>
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<td>EMS 157 ALS Trauma Care</td>
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<td>EMS 159 ALS Special Populations</td>
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<td>EMS 172 ALS Clinical Internship I</td>
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<td>EMS 173 ALS Field Internship II</td>
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<tr>
<td>ITE 115 Introduction to Computer Applications &amp; Concepts</td>
<td>3</td>
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<tr>
<td>EMS 201 EMS Professional Development</td>
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<tr>
<td>EMS 205 Advanced Pathophysiology</td>
<td>4</td>
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<tr>
<td>EMS 207 Advanced Patient Assessment</td>
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<tr>
<td>EMS 242 ALS Clinical Internship III</td>
<td>1</td>
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<tr>
<td>EMS 243 ALS Field Internship III</td>
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<tr>
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<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>
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<tr>
<td>EMS 209 Advanced Pharmacology</td>
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<td>EMS 211 Operations</td>
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<td>EMS 244 ALS Clinical Internship IV</td>
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<td>EMS 245 ALS Clinical Internship V</td>
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<td><strong>Total Credits For Program</strong></td>
<td><strong>71</strong></td>
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</tr>
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</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, HSS, 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...
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

<table>
<thead>
<tr>
<th>1st Semester</th>
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<tbody>
<tr>
<td>CHM 110 Survey of Chemistry</td>
<td>3</td>
<td>CHM 101</td>
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<td>FNS 110 Introduction to Funeral Service</td>
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<tr>
<td>HLT 143 Medical Terminology I</td>
<td>3</td>
<td>HIM 111</td>
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<td>ENG 111 College Composition I</td>
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<tr>
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<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
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<td>ITE 101 Introduction to Microcomputers</td>
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<td>CST 110 Introduction to Communication</td>
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<td>FNS 121 Anatomy for Funeral Service I</td>
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<td>PSY 116 Psychology of Death and Dying</td>
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<th>3rd Semester</th>
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<td>SOC 200 Principles of Sociology</td>
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<td>FNS 125 Microbiology for Funeral Service</td>
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<td>FNS 126 Pathology for Funeral Service</td>
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<td>FNS 236 Funeral Service Law</td>
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<td>FNS 113 Theory of Embalming Laboratory I</td>
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<td>FNS 211 Restorative Art I</td>
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<td>FNS 231 Principles of Funeral Management I</td>
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<th>5th Semester</th>
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<td>FNS 114 Theory of Embalming Laboratory II</td>
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<td>FNS 212 Restorative Art II</td>
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<td>FNS 232 Principles of Funeral Management II</td>
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<tr>
<td>FNS 245 Ethics</td>
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</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;
application of science degrees

9. Students who fail to receive a minimum grade of “C” in any course in the A.A.S. Funeral Services degree program may repeat the course one time. Two unsuccessful attempts in any course in the A.A.S. Funeral Services degree program will be cause for permanent removal from the program.

10. All funeral services classes taken previously at John Tyler Community College or any other ABFSE accredited school of funeral services must have been completed within 5 years of application to the Funeral Services Program in order to be considered toward the A.A.S. Degree in Funeral Services from John Tyler.

11. Students must complete the funeral services program within 4 semesters of initial admission into the Funeral Services Program. Exceptions may be made by the Department Chair on a case-by-case basis.

12. All students must provide documentation of completion of the Hepatitis-B vaccination series (have completed two of three doses) prior to beginning FNS 113, FNS 114 or FNS 214. Students who do not wish to receive the Hepatitis-B vaccination must sign a declination statement.

• pass the National Board Examination for funeral services as administered by the International Conference of Funeral Service Examining with a minimum score of 75 on the Arts Section and 75 on the Science Section. (Students in the Funeral Services Program at John Tyler Community College are required to take the exam prior to graduation at an additional cost as determined by the International Conference of Funeral Service Examining Boards)

• 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 as part of FNS 245 at an additional cost as determined by the International Conference of Funeral Service Examining Boards.

8. Students are required to take the National Board Examination before graduation.

9. 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.

10. 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.)

**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, physical disabilities and gerontology. Students will function effectively in a variety of therapeutic and rehabilitative activities.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placements 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>
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</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
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<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
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<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>
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<tr>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
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<tr>
<td>HMS/MEN Elective</td>
<td>6</td>
<td>See Note 6.</td>
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<td><strong>2nd Semester</strong></td>
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<tr>
<td>Mathematics/Science Elective</td>
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<td>MTH 120, MTH 158, MTH 163, MTH 170, BIO 101, CHM 101, CHM 111, PHY 101, PHY 201. See Note 6.</td>
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<tr>
<td>MEN 101 Mental Health Skill Training I</td>
<td>3</td>
<td>HMS 121. See Notes 1, 3 and 4.</td>
</tr>
<tr>
<td>ENG 112 College Composition II</td>
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<td>PSY 215 Abnormal Psychology</td>
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<td>PSY 230, SOC 268</td>
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<td><strong>3rd Semester</strong></td>
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<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>
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<td>Information Technology Elective</td>
<td>3</td>
<td>See Note 12.</td>
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<td>MEN 102 Mental Health Skill Training II</td>
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<td>MEN 198, HMS227. See Notes 1, 4 and 5.</td>
</tr>
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<td><strong>4th Semester</strong></td>
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<tr>
<td>Social Science Elective</td>
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<td>See Notes 6, 11 and 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>
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<td>MEN 196 On-Site Training</td>
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<td>MEN 296. See Notes 1, 5, 9, 10 and 14.</td>
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<td>MEN/HMS Elective</td>
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<tr>
<td><strong>Total Credits For Program</strong></td>
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</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. MEN 290 and MEN 296 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. 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 will 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 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).
Human Services, Criminology Specialization

Associate in 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 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 placements 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

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<tr>
<th>Course Options</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tbody>
<tr>
<td>ENG 111 College Composition I</td>
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<td>HMS 100 Introduction to Human Services</td>
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<td>See Notes 1, 2 and 3.</td>
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<td>SDV 100 College Success Skills</td>
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<td>SOC 200 Principles of Sociology</td>
<td>3</td>
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<tr>
<td>ADJ 100 Survey of Criminal Justice or ADJ 105 The Juvenile Justice System</td>
<td>3</td>
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2nd Semester

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<td>Mathematics/Science Elective</td>
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<td>MTH 120, MTH 158, MTH 163, MTH 170, BIO 101, CHM 101, CHM 111, PHY 101, PHY 201. See Note 6.</td>
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<tr>
<td>MEN 101 Mental Health Skill Training I</td>
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<td>HMS121, See Notes 1, 3 and 4.</td>
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3rd Semester

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<td>HMS 251 Substance Abuse I</td>
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<td>See Note 12.</td>
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<td>MEN 102 Mental Health Skill Training II</td>
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4th Semester

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<td>Health/Physical Education Elective</td>
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<td>See Note 8.</td>
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<tr>
<td>MEN 190 Coordinated Practice</td>
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<td>MEN 290. See Notes 1, 5, 9, 10 and 14.</td>
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<td>MEN 196 On-Site Training</td>
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<td>MEN 296. See Notes 1, 5, 9, 10 and 14.</td>
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<tr>
<td>ADJ 212 Criminal Law, Evidence and Procedures II</td>
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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.
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 trainin/practicum site additional tests may be required. Plan accordingly. This may will 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 placements 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>
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<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>ENG 111 College Composition I</td>
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<tr>
<td></td>
<td>HMS 100 Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
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<td>SDV 100 College Success Skills</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
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<td>BIO 101 General Biology I</td>
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<td>Social Science Elective</td>
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<tr>
<td></td>
<td>PSY 100 Principles of Applied Psychology</td>
<td>3</td>
</tr>
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<td></td>
<td>Mathematics/Science Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG 112 College Composition II</td>
<td>3</td>
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<td>BIO 102 General Biology II</td>
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<tr>
<td>3rd Semester</td>
<td>HMS 251 Substance Abuse I</td>
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<td>MEN 102 Mental Health Skill Training II</td>
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<tr>
<td></td>
<td>Humanities Elective</td>
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<td></td>
<td>PSY 230 Developmental Psychology</td>
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<td></td>
<td>General Elective</td>
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<td>SOC 211</td>
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<tr>
<td>4th Semester</td>
<td>MEN 190 Coordinated Practice</td>
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</tr>
<tr>
<td></td>
<td>MEN 196 On-Site Training</td>
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<td></td>
<td>Health/Physical Education Elective</td>
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<td></td>
<td>PHI Ethics</td>
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<td></td>
<td>Foreign Language 101 Course</td>
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</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 196 or 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 190/MEN 290 or MEN 196/MEN 296 (see note 16).
7. MEN 190 and MEN 196, or 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 website (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 200/203 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, CHM 129, CHM 130, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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 placements 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>
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<tbody>
<tr>
<td>PHI 111 Logic I</td>
<td>3</td>
<td>PHI 220. See Note 6.</td>
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<tr>
<td>ENG 115 Technical Writing</td>
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<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>ITN 261. See Note 7.</td>
</tr>
<tr>
<td>MTH 158 College Algebra</td>
<td>3</td>
<td>MTH 163</td>
</tr>
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<td>SDV 100 College Success Skills</td>
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<td>Health/Physical Education Elective</td>
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<th>2nd Semester</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BUS 100 Introduction to Business</td>
<td>3</td>
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<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>
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<tr>
<td>ITP 100 Software Design</td>
<td>3</td>
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<td>IT Track Courses</td>
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<tbody>
<tr>
<td>ACC 211 Principles of Accounting I</td>
<td>3</td>
<td>ECO 201, ECO 202</td>
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<tr>
<td>ECO 120 Survey of Economics</td>
<td>3</td>
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<tr>
<td>ITP 251 Systems Analysis and Design</td>
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<tr>
<td>PSY 126 Psychology for Business and Industry</td>
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<td>PSY 100, PSY 200/PSY 203</td>
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<td>IT Track Course</td>
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<tbody>
<tr>
<td>ACC 212 Principles of Accounting II</td>
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</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>
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<tr>
<td>ITE 290 Coordinated Internship</td>
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<td>IT Track Courses</td>
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</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

**Continued**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td><strong>Cisco Network</strong></td>
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<tr>
<td>ITN 154 Networking Fundamentals - Cisco</td>
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<tr>
<td>ITN 155 Introductory Routing - Cisco</td>
<td>3</td>
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<tr>
<td>ITN 156 Basic Switching and Routing - Cisco</td>
<td>3</td>
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<tr>
<td>ITN 157 WAN Technologies - Cisco</td>
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<td>ITP Elective Track Course (ITP 110, ITP 120, OR ITP 160)</td>
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<tbody>
<tr>
<td><strong>Computer Applications</strong></td>
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<tr>
<td>ITD 110 Web Page Design I</td>
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<tr>
<td>ITD 130 Database Fundamentals</td>
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<td>ITD 132 Structured Query Language</td>
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<td>ITD 210 Web Page Design II</td>
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<tr>
<td><strong>Cyber Security Track</strong></td>
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<tr>
<td>ITN 260 Network Security Basics</td>
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<tr>
<td>ITN 262 Network Communication, Security and Authentication</td>
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</tr>
<tr>
<td>ITN 263 Internet/Intranet Firewalls and E-Commerce Security</td>
<td>3</td>
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<tr>
<td>ITN 266 Network Security Layers</td>
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<td>ITN 267 Legal Topics in Network Security</td>
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<tr>
<td><strong>Network Support</strong></td>
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<tr>
<td>ITN 171 Unix I</td>
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<td>ITN 111 Server Administration Windows 2008</td>
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<td>ITN 245 Network Troubleshooting</td>
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<td>ITN 260 Network Security Basics</td>
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<td>ITP Elective Track Course (ITP 110, ITP 120, OR ITP 160)</td>
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<td><strong>Program Development</strong></td>
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<td>ITP 110 Visual Basic Programming I</td>
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<tr>
<td>ITP 120 Java Programming I</td>
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<td>ITP 210 Visual Basic Programming II OR</td>
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<tr>
<td>ITP 220 Java Programming II</td>
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<tr>
<td>ITP 160 Introduction to Game Design and Development</td>
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<td>ITP Elective Track Course (ITP 171, ITP 111, OR ITP 154)</td>
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</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

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 placements 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.

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, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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: ECO, 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 placements 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>
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<tbody>
<tr>
<td>CAD 151 Engineering Drawing Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>ELE 150 A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
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<tr>
<td>MEC 113 Materials and Processes of Industry</td>
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<tr>
<td>MTH 103 Applied Technical Mathematics I</td>
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<td>SDV 100 College Success Skills</td>
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Total Credits 17

2nd Semester

<table>
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<tr>
<td>CAD 152 Engineering Drawing Fundamentals II</td>
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<tr>
<td>ELE 159 Electrical Motors</td>
<td>3</td>
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<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>3</td>
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<tr>
<td>MEC 101 Introduction to Engineering Technology I</td>
<td>2</td>
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<td>MTH 104 Applied Technical Mathematics II</td>
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<td>Health/Physical Education Elective</td>
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Total Credits 17

3rd Semester

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<tbody>
<tr>
<td>CAD 241 Parametric Solid Modeling I</td>
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<tr>
<td>ELE 239 Programmable Controllers</td>
<td>3</td>
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<tr>
<td>MEC 140 Introduction to Mechatronics</td>
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<tr>
<td>MEC 211 Machine Design I</td>
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Total Credits 16

4th Semester

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<td>ELE 240 Advanced Programmable Logic Controllers</td>
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<td>MEC 212 Machine Design II</td>
<td>4</td>
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<tr>
<td>MEC 266 Applications of Fluid Mechanics</td>
<td>3</td>
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<tr>
<td>MEC 270 Computations for Engineering Technology</td>
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<tr>
<td>Humanities Elective</td>
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Total Credits 16

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/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. 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).
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. Provide quality, safe, patient-centered nursing care through evidence-based practice to diverse populations across the lifespan.
2. Demonstrate sound clinical judgment based on evidence-based nursing practice that promotes the health of patients, families and the community.
3. Evaluate patient safety through understanding system effectiveness and individual performance.
4. Collaborate with the inter-professional healthcare team and patient/family to provide safe, effective and coordinated patient care.
5. Incorporate data, technology and information management systems to communicate, decrease error and support effective clinical judgment.
6. Integrate management principles and legal/ethical standards of care into the professional nursing role.

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.

Special Accreditation Status
The Nursing Program is approved by the Virginia Board of Nursing and is accredited by the Accreditation Commission for Education in Nursing. Calculation of Credit Hours: The nursing program follows VCCS and JTCC guidelines for calculating credit hours. Lecture: one clock hour equals one credit hour. Clinical laboratory: three clock hours per credit hour.

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 (HDEP): Theory is delivered in a virtual format. Wimba Classroom is used for course meetings and office hours. Faculty may require mandatory on-campus activities and/or mandatory Wimba Classroom 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 requirements on the website.
3. All applicants must take a nursing pre-entrance test. Specific details regarding acceptable entrance scores are located on the program website. Test results must be no older than 3 years at the time of application. Students must submit a copy of test results with application.
4. Math, science and ITE courses have specific time limits.
5. All accepted students must have current CPR certification through the American Heart Association: BLS Healthcare Provider. Internet courses are not acceptable unless there is a supervised demonstration component.
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. See the Nursing Student Handbook for all program policies and procedures.
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. It is the student’s responsibility to review all program materials, including materials found on the program website, and to stay current with the program requirements, policies and procedures. It is recommended that students read posted materials at least once a semester.
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 program website.
13. Students have Nursing Program advisors assigned after they have been curriculum placed by the counseling office. Students are strongly encouraged to seek guidance from nursing advisors while preparing for the application process.

### Program Curriculum
Modified for Fall 2014 pending ACEN approval. Contact your advisor and/or the Nursing Student Handbook to verify curriculum effective Fall 2014.

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
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<tbody>
<tr>
<td>BIO 141 Human Anatomy &amp; Physiology I</td>
<td>4</td>
<td>BIO 231. See Note 5.</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
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<tr>
<td>MTH 158 College Algebra</td>
<td>3</td>
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<tr>
<td>PSY 230 Developmental Psychology</td>
<td>3</td>
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<td>SDV 100 College Success Skills</td>
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<tr>
<td>BIO 142 Human Anatomy &amp; Physiology II</td>
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<td>BIO 232</td>
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<td>NUR 111 Nursing I</td>
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<td>NUR 226 Health Assessment</td>
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<tbody>
<tr>
<td>NUR 118 First Level Nursing II</td>
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<td>SOC 200 Principles of Sociology</td>
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<tr>
<td>Information Technology Elective</td>
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<tr>
<td>NUR 216 Integrated Concepts II</td>
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<tr>
<td>HLT 143 Medical Terminology I or HLT 230 Principles of Nutrition and Human Development</td>
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<th>5th Semester</th>
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<tr>
<td>NUR 217 Integrated Concepts III</td>
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<td>NUR 298 Seminar and Project</td>
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<td>Humanities Elective</td>
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<td>PHI 220. See Note 5.</td>
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<td><strong>Total Credits For Program</strong></td>
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### 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. BIO 231, BIO 232, HLT 230 and PHI 220 courses may be required by some four-year universities for those pursuing the B.S.N. 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.

For additional information on this program, please contact the Nursing Office: 804-622-8700 (Nursing Education Center).
Police Science/Criminal Justice (name change to Criminal Justice pending approval)

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 placements 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**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tbody>
<tr>
<td>ADJ 100 Survey of Criminal Justice</td>
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<tr>
<td>ENG 111 College Composition I</td>
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<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
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<tr>
<td>MTH 120 Introduction to Mathematics</td>
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<td>MTH 158, MTH 163, MTH 170</td>
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<tr>
<td>SOC 200 Principles of Sociology</td>
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<td>SDV 100 College Success Skills</td>
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<tr>
<td>ADJ 105 The Juvenile Justice System</td>
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<tr>
<td>ADJ 107 Survey of Criminology</td>
<td>3</td>
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<tr>
<td>ADJ 229 Law Enforcement and the Community or ADJ 145 Corrections and the Community</td>
<td>3</td>
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<tr>
<td>PSY 100 Principles of Applied Psychology</td>
<td>3</td>
<td>PSY 200/PSY 203</td>
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<td>Philosophy or Religion Elective</td>
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<tr>
<td>ADJ 111 Law Enforcement Organization and Administration I or ADJ 245 Management of Correctional Facilities</td>
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<td>ADJ 230 Civil Liabilities in Criminal Justice</td>
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<td>ADJ 211 Criminal Law, Evidence and Procedures I</td>
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<td>ADJ 133 Ethics and the Criminal Justice Professional</td>
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<td>ADJ 236 Principles of Criminal Investigation</td>
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<td>ADJ 247 Criminal Behavior</td>
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<td>ADJ 212 Criminal Law, Evidence and Procedures II</td>
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<td>ADJ 227 Constitutional Law for Justice Personnel or ADJ 241 Correctional Law</td>
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<td>CST 100 Principles of Public Speaking</td>
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<td>Administration of Justice Elective</td>
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<td>Health/Physical Education Elective</td>
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**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).
Police Science/Criminal Justice, Homeland Security Specialization (name change to Criminal Justice, Homeland Security Specialization pending approval)

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

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
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<th>Standard Course Options</th>
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<tbody>
<tr>
<td>1st Semester</td>
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<tr>
<td>ADJ 100 Survey of Criminal Justice</td>
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<tr>
<td>ENG 111 College Composition I</td>
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<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
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<td>See Note 3.</td>
</tr>
<tr>
<td>MTH 120 Introduction to Mathematics</td>
<td>3</td>
<td>MTH 158, MTH 163, MTH 170</td>
</tr>
<tr>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
<td>SOC 201, SOC 202</td>
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<td>2nd Semester</td>
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<tr>
<td>ADJ 160 Police Response to Critical Incidents</td>
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<tr>
<td>ADJ 107 Survey of Criminology</td>
<td>3</td>
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<td>ADJ 229 Law Enforcement and the Community or ADJ 145 Corrections and the Community</td>
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<tr>
<td>PSY 100 Principles of Applied Psychology</td>
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<td>PSY 200, PSY 203, PSY 201, PSY 202</td>
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<td>Philosophy or Religion Elective</td>
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<td>Recommended: REL 230. See Note 4.</td>
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<td>3rd Semester</td>
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<tr>
<td>ADJ 163 Crime Analysis and Intelligence</td>
<td>3</td>
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<tr>
<td>ADJ 170 Street Gangs and Law Enforcement</td>
<td>3</td>
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<tr>
<td>ADJ 211 Criminal Law, Evidence and Procedures I</td>
<td>3</td>
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<tr>
<td>ADJ 133 Ethics and the Criminal Justice Professional</td>
<td>3</td>
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<td>ADJ 236 Principles of Criminal Investigation</td>
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<td>ADJ 247 Criminal Behavior</td>
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<td>4th Semester</td>
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<tr>
<td>ADJ 234 Terrorism and Counter-Terrorism</td>
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<td>ADJ 212 Criminal Law, Evidence and Procedures II</td>
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<tr>
<td>ADJ 227 Constitutional Law for Justice Personnel or ADJ 241 Correctional Law</td>
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<td>ADJ 244 Terrorism Response Planning</td>
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<tr>
<td>CST 100 Principles of Public Speaking</td>
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<td>Health/Physical Education Elective</td>
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<tr>
<td>Total Credits For Program</td>
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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).
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 placements 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 related 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

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
<tbody>
<tr>
<td>1st Semester</td>
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<tr>
<td>ENG 111 College Composition I</td>
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<tr>
<td>IND 116 Applied Technology</td>
<td>3</td>
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<tr>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
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<td>See Note 1.</td>
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<td>MTH 103 Applied Technical Mathematics I</td>
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<td>SDV 100 College Success Skills</td>
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<td>MTH 163.</td>
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<td>Technical Elective</td>
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<tr>
<td>2nd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 115 Technical Writing</td>
<td>3</td>
<td>ENG 112</td>
</tr>
<tr>
<td>PSY 126 Psychology for Business and Industry</td>
<td>3</td>
<td></td>
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<tr>
<td>Health or Physical Education Elective</td>
<td>2</td>
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</tr>
<tr>
<td>Microcomputer/Programming/Software Elective</td>
<td>3</td>
<td>See Note 3.</td>
</tr>
<tr>
<td>Technical Electives</td>
<td>6/7</td>
<td>See Note 2.</td>
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<tr>
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<tr>
<td>3rd Semester</td>
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</tr>
<tr>
<td>IND 101 Quality Assurance Technology I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IND 197 Cooperative Education</td>
<td>3</td>
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<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>See Note 4.</td>
</tr>
<tr>
<td>Technical Electives</td>
<td>7</td>
<td>See Note 2.</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td>4th Semester</td>
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</tr>
<tr>
<td>IND 137 Team Concepts and Problem Solving</td>
<td>3</td>
<td></td>
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<tr>
<td>IND 297 Cooperative Education</td>
<td>3</td>
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<tr>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
<td>See Note 6.</td>
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<td>7</td>
<td>See Note 2.</td>
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<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>65/66</strong></td>
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</tbody>
</table>

**SUGGESTED TECHNICAL COURSES FOR FIELDS OF INTEREST:**

<table>
<thead>
<tr>
<th>Field of Interest</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating, Ventilation and Air Conditioning</td>
<td></td>
</tr>
<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>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>
### Industrial Electricity
- DRF 160 Machine Blueprint Reading  3
- ELE 137 National Electric Code – Industrial  3
- ELE 150 A.C. and D.C. Circuit Fundamentals  4
- ELE 156 Electrical Control Systems  3
- ELE 159 Electrical Motors  3
- ELE 239 Programmable Logic Controllers  3
- ELE 240 Advanced Programmable Controllers  3
- Technical Elective  1

**Total** 23

### Mechanical Maintenance
- DRF 160 Machine Blueprint Reading  3
- ELE 150 A.C. and D.C. Circuit Fundamentals  4
- ELE 159 Electrical Motors  3
- IND 116 Applied Technology  3
- MAC 131 Machine Lab I  2
- MEC 154 Mechanical Maintenance I  3
- MEC 254 Mechanical Maintenance II  3
- Welding Technology Elective  2

**Total** 23

### Precision Machining Technology
- DRF 128 Geometric Dimensioning and Tolerancing  2
- MAC 121 Computer Numerical Control I  3
- MAC 122 Numerical Controls II  3
- MAC 161 Machine Shop Practices I  3
- MAC 162 Machine Shop Practices II  3
- MAC 163 Machine Shop Practices III  3
- MAC 164 Machine Shop Practices IV  3
- MAC 123 Numerical Control III  3

**Total** 23

### Precision Machining Computer Numerical Control (CNC)
- MAC 121 Computer Numerical Control I  3
- MAC 122 Computer Numerical Control II  3
- MAC 123 Computer Numerical Control III  3
- DRF 128 Geometric Dimensioning and Tolerancing  2
- MAC 161 Machine Shop Practices I  3
- MAC 162 Machine Shop Practices II  3
- MAC 134 CMM Operation and Programming  2
- MAC 130 Introduction to Electric Discharge Machining  2
- MAC Elective  3

**Total** 24

### Residential Electricity
- ELE 118 Practical Electricity  2
- ELE 127 Residential Wiring Methods  3
- ELE 131 National Electrical Code I  3
- ELE 150 A.C. and D.C. Circuit Fundamentals  4
- ELE 151 Electrical Troubleshooting  3
- Technical Electives  8

**Total** 23
### 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 120 Introduction to Welding</td>
<td>2</td>
</tr>
<tr>
<td>WEL 116 Oxyfuel Welding</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>IND 105 Non Destructive Testing and 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 199 Supervised Study</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></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 technical elective requirement can be satisfied by courses with the following prefixes: AIR, ARC, DRF, EGR, ELE, IND, INS, MAC, MEC, SAF or WEL. Selection must be approved in advance by the faculty advisor.
3. The information systems technology elective requirement can be satisfied by appropriate computer-related courses with the following prefixes: ARC, DRF, EGR, ITD, ITE, ITN, ITP or MAC. Selection must be approved in advance by the advisor.
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. Part-time students should consult their faculty advisors regarding appropriate course sequences.
6. The social/behavioral sciences elective requirements can be satisfied by courses with the following prefixes: PSY, SOC, ECO, GEO, PLS and HIS.
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).
Certificates

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 placements 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 placements 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

<table>
<thead>
<tr>
<th>Course Options</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>CHD 165 Observation and Participation in Early Childhood/Primary Settings</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>Information Technology Elective</td>
<td>1</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 Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 118 Methods and Materials in the Language Arts for Children</td>
<td>3</td>
</tr>
<tr>
<td>CHD 146 Methods and Materials for Teaching Math, Science and Social Studies to Children</td>
<td>3</td>
</tr>
<tr>
<td>CHD 205 Guiding the Behavior of Children</td>
<td>3</td>
</tr>
<tr>
<td>CHD 216 Early Childhood Programs, School, and Social Change</td>
<td>3</td>
</tr>
<tr>
<td>CHD 270 Administration of Early Childhood Programs</td>
<td>3</td>
</tr>
<tr>
<td>CHD 265 Advanced Observation and Participation in Early Childhood/Primary Settings</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**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).
Certified (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 placements 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>
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<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</td>
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**Total Credits** 15

#### 2nd Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
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</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>
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<tr>
<td>ENG 112 College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ART 287 Portfolio and Resume Preparation</td>
<td>1 See Note 2.</td>
</tr>
</tbody>
</table>

**Total Credits** 17

**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 placements 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>
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</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>HIS 101, HIS 111</td>
</tr>
<tr>
<td>HIS 121 United States History 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>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>
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</table>

<table>
<thead>
<tr>
<th><strong>2nd Semester</strong></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, GOL 105, NAS 125, NAS 130, PHY 101, PHY 102, 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).
Homeland Security
Certificate (C)

**Purpose**
The certificate in homeland security is designed to provide students with the knowledge and skills needed to conduct a homeland security evaluation and to assess, investigate and respond to terrorism incidents. It also provides criminal justice practitioners with an opportunity for academic growth and the development of specialized skills in homeland security.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placements 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>ADJ 160 Police Response to Critical Incidents</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 163 Crime Analysis and Intelligence</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 227 Constitutional Law for Justice Personnel</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>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
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</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 234 Terrorism and Counter Terrorism</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 236 Principles of Criminal Investigation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 244 Terrorism Response Planning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ADJ 247 Criminal Behavior</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><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program**

| 30 |

**Notes and Additional Curriculum Options**
1. Students with good computer skills may seek to satisfy this requirement by CLEP.

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).
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 placements 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>DRF 128 Geometric Dimensioning and Tolerancing</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MAC 161 Machine Shop Practices I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTH 103 Applied Technical Mathematics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
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<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
<tbody>
<tr>
<td>MAC 121 Computer Numerical Control I</td>
<td>3</td>
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</tr>
<tr>
<td>PSY 126 Psychology for Business and Industry</td>
<td>3</td>
<td>PSY 100</td>
</tr>
<tr>
<td>MAC 162 Machine Shop Practices II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Precision Machining Technology Elective</td>
<td>3</td>
<td>MAC 195, MAC 295</td>
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<tr>
<th>3rd Semester</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 115 Technical Writing</td>
<td>3</td>
<td>ENG 111</td>
</tr>
<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>
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</tr>
<tr>
<td>MAC 163 Machine Shop Practices III</td>
<td>3</td>
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<tr>
<th>4th Semester</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MAC 164 Machine Shop Practices IV</td>
<td>3</td>
<td></td>
</tr>
<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>
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<td><strong>Total Credits</strong></td>
<td><strong>8</strong></td>
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</tr>
</tbody>
</table>

**Total Credits For Program** | **40** |

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 placements 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>
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</thead>
<tbody>
<tr>
<td>WEL 150 Welding Drawing and Interpretation</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MTH 103 Applied Technical Mathematics I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDV 100 College Success Skills</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>WEL 116 Oxyfuel Welding</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>WEL 120 Introduction to Welding</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>WEL 123 Shielding Metal Arc Welding (Basic)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 105 Nondestructive Inspection and Testing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WEL 130 Insert Gas Welding</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WEL 160 Gas Metal Arc Welding</td>
<td>3</td>
<td></td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 115 Technical Writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WEL 175 Semi-Automatic Processes</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSY 126 Psychology for Business and Industry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
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<table>
<thead>
<tr>
<th>4th Semester</th>
<th>Credits</th>
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</tr>
</thead>
<tbody>
<tr>
<td>WEL 124 Shielded Metal Arc Welding (Advanced)</td>
<td>3</td>
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</tr>
<tr>
<td>WEL 199 Supervised Study</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>6</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>37</strong></td>
<td></td>
</tr>
</tbody>
</table>

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 placements 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. 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>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>Total Credits</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

| 2nd Semester | | |
| ACC 212 Principles of Accounting II | 3 | |
| Accounting Elective | 3 | BUS 241 |
| Total Credits | 6 | |

| 3rd Semester | | |
| ACC 221 Intermediate Accounting I | 4 | |
| ACC 231 Cost Accounting I | 3 | |
| Total Credits | 7 | |

| 4th Semester | | |
| ACC 215 Computerized Accounting | 3 | |
| ACC 222 Intermediate Accounting II | 4 | |
| Total Credits | 7 | |

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).
Administration of Justice/Criminal Justice (name change to Criminal Justice pending approval)

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 placements 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>
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<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>
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</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).
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 placements 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>Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>9</td>
<td></td>
</tr>
<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>
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<td><strong>Total Credits</strong></td>
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<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td>9</td>
<td></td>
</tr>
<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>
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<td><strong>Total Credits</strong></td>
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</tr>
<tr>
<td>3rd Semester</td>
<td>9</td>
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</tr>
<tr>
<td>MEN 102 Mental Health Skill Training II</td>
<td>3</td>
<td>HMS 227, MEN 198, HMS 225</td>
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<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>
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<tr>
<td><strong>Total Credits For Program</strong></td>
<td>27</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. 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).
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 placements 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>
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<tr>
<td><strong>Total Credits</strong></td>
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<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>
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<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 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 placements 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.

<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>
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</tr>
<tr>
<td>BIO 141 Human Anatomy and Physiology I</td>
<td>4</td>
<td>BIO 231. See Note 4.</td>
</tr>
<tr>
<td>ENG 111 College Composition I</td>
<td>3</td>
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</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>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><strong>2nd Semester</strong></th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 142 Human Anatomy and Physiology II</td>
<td>4</td>
<td>BIO 232. See Note 4.</td>
</tr>
<tr>
<td>SOC 200 Principles of Sociology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HLT 143 Medical Terminology I</td>
<td></td>
<td>HLT 230. See Note 4.</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
<td>PHI 220. See Notes 2 and 4.</td>
</tr>
<tr>
<td>Information Technology Elective</td>
<td>1</td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 28

**Notes and Additional Curriculum Options**
1. Students must have documented a year of high school biology and chemistry with a grade of “C” or better or the college-level equivalent prior to taking BIO 141 and BIO 142. Students must complete BIO 231 prior to taking BIO 232. BIO 231 and BIO 232 require one full year of college biology and one full year of college chemistry or divisional approval as prerequisites.

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/humanitiesselectives) for a list of approved conceptual and applied humanities electives.

3. 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.

4. BIO 231, BIO 232, HLT 230, and PHI 220 courses may be required by some four-year universities for those pursuing the B.S.N. Students should consult their selected four-year university and their nursing faculty advisor for guidance.

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 placements 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.
2. Students will complete five hours per week of on-site training at selected athletic coaching sites approved by JTCC.

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 840-594-1480 (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 placements 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

1st Semester

<table>
<thead>
<tr>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 100 Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HMS 106 Working with Death and Dying</td>
<td>3</td>
</tr>
<tr>
<td>MEN 101 Mental Health Skill Training I</td>
<td>3</td>
</tr>
<tr>
<td>SOC 246 Sociology of Death and Dying</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 Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEN 102 Mental Health Skill Training II</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>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></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 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).
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 placements 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 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>
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<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>AST 205, 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 placements 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>
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</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>
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<td><strong>Total Credits</strong></td>
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</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.)

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>ITN 101 Introduction to Network Concepts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITN 154 Networking Fundamentals-Cisco</td>
<td>4</td>
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<tr>
<td></td>
<td>ITE 115 Introduction to Computer Software Applications</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>10</strong></td>
</tr>
<tr>
<td>2nd</td>
<td>ITN 155 Introductory Routing-Cisco</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>3rd</td>
<td>ITN 156 Basic Switching and Routing-Cisco</td>
<td>3</td>
</tr>
<tr>
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<td><strong>Total Credits</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>4th</td>
<td>ITN 157 WAN Technologies-Cisco</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITE 290 Coordinated Internship</td>
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<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>4</strong></td>
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<td></td>
<td><strong>Total Credits For Program</strong></td>
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</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).

Civil Engineering
Computer-Aided Drafting
Career Studies Certificate (C.S.C.)

Program Curriculum

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>CAD 260 Computer Applications for Surveyors and Technicians</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>2nd</td>
<td>CAD 262 Computer-Aided Civil Design and Hydrology</td>
<td>3</td>
</tr>
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<td></td>
<td>CAD Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits For Program</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

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).
### Computer-Aided Drafting

**Career Studies Certificate (C.S.C.)**

**Purpose**
Introduces students to operations and applications of a typical computer-aided drafting system (CAD).

**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</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD 201 Computer-Aided Drafting and Design I</td>
<td>3</td>
<td></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>6</strong></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD 202 Computer-Aided Drafting and Design II</td>
<td>3</td>
<td>ARC 221, GIS 101, CAD 241, CAD 260</td>
</tr>
<tr>
<td>Drafting Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>6</strong></td>
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</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td><strong>12</strong></td>
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</tbody>
</table>

**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).

### 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 placements 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</td>
<td></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>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>
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<tr>
<td>2nd</td>
<td></td>
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<tr>
<td>ITE 215 Advanced Computer Applications and Integration</td>
<td>3</td>
<td>See Note 1.</td>
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<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>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
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<tr>
<td><strong>Total Credits For Program</strong></td>
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</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 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>
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<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>
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<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
<tbody>
<tr>
<td>MAC 123 Computer Numerical Control III</td>
<td>3</td>
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<tr>
<td>MAC 130 EDM and CAM</td>
<td>2</td>
<td>MAC 195, MAC 295</td>
</tr>
<tr>
<td>MAC EEE Machine Electives</td>
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<td><strong>Total Credits</strong></td>
<td><strong>7</strong></td>
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</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).

Cyber Security (pending approval)

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>
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<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>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</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 program for young children.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placements 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>CHD 120</td>
<td>3</td>
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<tr>
<td>CHD 145</td>
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<td>CHD 205</td>
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<tr>
<td>SDV 100</td>
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<td><strong>Total Credits</strong></td>
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</tr>
<tr>
<td><strong>2nd Semester</strong></td>
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<td></td>
</tr>
<tr>
<td>CHD 165</td>
<td>3</td>
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</tr>
<tr>
<td>CHD 167</td>
<td>3</td>
<td>CHD 216. See Note 1.</td>
</tr>
<tr>
<td>EDU 235</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits For Program** 19

**Notes and Additional Curriculum Options**
1. Students who will use this credential to satisfy national Head Start requirements will enroll in CHD 167 to prepare a portfolio to submit to the Virginia Department of Social Services for evaluation. Students not using this program in that way should enroll in CHD 216 to meet the requirements for the Early Childhood Development certificate and ultimately the Associate in Applied Science (A.A.S.) degree.

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. Students must also complete placements 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>
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</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
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</tr>
<tr>
<td>ELE 131</td>
<td>3</td>
<td></td>
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<tr>
<td>ELE 150</td>
<td>4</td>
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<tr>
<td><strong>2nd Semester</strong></td>
<td></td>
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</tr>
<tr>
<td>ELE 138</td>
<td>3</td>
<td>ELE 156</td>
</tr>
<tr>
<td>ELE 151</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<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 (pending approval)

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 placements 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**

### 1st Semester

<table>
<thead>
<tr>
<th>Course Options</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>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>9</strong></td>
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</table>

### 2nd Semester

<table>
<thead>
<tr>
<th>Course Options</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>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>7</strong></td>
<td></td>
</tr>
</tbody>
</table>

**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).
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 placements 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>Semester</th>
<th>Course Description</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>SDV 101 Orientation to Health Sciences</td>
<td>1</td>
<td>SDV 100</td>
</tr>
<tr>
<td></td>
<td>EMS 111 Emergency Medical Technician - Basic</td>
<td>7</td>
<td>EMS 112 and EMS 113</td>
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<tr>
<td></td>
<td>EMS 120 Emergency Medical Technician - Basic Clinical</td>
<td>1</td>
<td>See Note 1.</td>
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<td></td>
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<tr>
<td>2nd Semester</td>
<td>EMS 151 Introduction to Advanced Life Support</td>
<td>4</td>
<td>See Note 2.</td>
</tr>
<tr>
<td></td>
<td>EMS 152 Advanced Medical Care</td>
<td>2</td>
<td>See Note 3.</td>
</tr>
<tr>
<td></td>
<td>EMS 153 Basic ECG Recognition</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EMS 170 ALS Internship I</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>3rd Semester</td>
<td>EMS 154 ALS Cardiac Care</td>
<td>2</td>
<td>See Note 4.</td>
</tr>
<tr>
<td></td>
<td>EMS 157 ALS Trauma Care</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EMS 159 ALS Special Populations</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>EMS 172 ALS Clinical Internship II</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EMS 173 ALS Field Internship II</td>
<td>1</td>
<td></td>
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<tr>
<td></td>
<td>Total Credits</td>
<td>10</td>
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<td></td>
<td>Total Credits For Program</td>
<td>28</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 – 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).
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**

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV 171 Surveying I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CAD 201 Computer Aided Drafting and Design</td>
<td>3</td>
<td></td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS 101 Introduction to Geospatial Technology I</td>
<td>3</td>
<td></td>
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<tr>
<td>Technical Elective</td>
<td>3</td>
<td>CAD 202, ARC 221, GIS 102</td>
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<td><strong>Total Credits</strong></td>
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</tbody>
</table>

**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).

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 placements 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>
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</thead>
<tbody>
<tr>
<td>AIR 121 Air Conditioning and Refrigeration 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>MTH 103 Applied Technical Mathematics I</td>
<td>3</td>
<td></td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR 122 Air Conditioning and Refrigeration II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AIR 134 Circuits and Controls I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE 131 National Electrical Code I</td>
<td>3</td>
<td></td>
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<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR 154 Heating Systems I</td>
<td>3</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td>3</td>
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</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).
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 placements 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>
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<tbody>
<tr>
<td>BUS 111 Principles of Supervision I</td>
<td>3</td>
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<tr>
<td>MEN 102 Mental Health Skill Training II</td>
<td>3</td>
<td>HMS 227, MEN 198</td>
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<tr>
<td>PSY 126 Psychology for Business and Industry</td>
<td>3</td>
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<thead>
<tr>
<th>2nd Semester</th>
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<tbody>
<tr>
<td>BUS 200 Principles of Management</td>
<td>3</td>
<td>BUS 201</td>
</tr>
<tr>
<td>MEN 190 Coordinated Practice</td>
<td>3</td>
<td>See Notes 1, 4 and 5. MEN 290</td>
</tr>
<tr>
<td>MEN 196 On-Site Training</td>
<td>3</td>
<td>See Notes 1, 4 and 5. MEN 296</td>
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<td><strong>Total Credits</strong></td>
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</table>

**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. Students must also complete placements 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>
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<tbody>
<tr>
<td>ELE 150 A.C. and D.C. Circuit Fundamentals</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MTH 103 Applied Technical Mathematics I</td>
<td>3</td>
<td>MTH 104</td>
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<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
<tbody>
<tr>
<td>ELE 118 Practical Electricity</td>
<td>2</td>
<td></td>
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<tr>
<td>ELE 159 Electrical Motors</td>
<td>3</td>
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<table>
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<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
<tbody>
<tr>
<td>ELE 156 Electrical Control Systems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELE 239 Programmable Controllers</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
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<tr>
<th>4th Semester</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ELE 137 National Electric Code – Industrial</td>
<td>3</td>
<td>See Note 2.</td>
</tr>
<tr>
<td>ELE 240 Advanced Programmable Logic Controllers</td>
<td>3</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</tr>
</tbody>
</table>

**Total Credits For Program** 24

**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 placements 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
- ELE 150 A.C. and D.C. Circuit Fundamentals 4
- IND 116 Applied Technology 3
- MAC 131 Machine Lab I 2
- MEC 154 Mechanical Maintenance I 3
- MTH 103 Applied Technical Mathematics I 3
Total Credits 15

2nd Semester
- DRF 160 Machine Blueprint Reading 3
- ELE 159 Electrical Motors 3
- MEC 254 Mechanical Maintenance II 3
- WEL 123 Shielded Metal Arc Welding (Basic) 4
Total Credits 13

Total Credits For Program 28

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).

Museum Studies (pending approval)

Career Studies Certificate (C.S.C.)

Purpose
To provide an introduction to the museum field and 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 and must complete placement tests (or equivalent) in English. 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

1st Semester
* ART 184 Survey of Museum Practice 3
Topics in Museum Studies 1
Topics in Museum Studies 1
Total Credits 5

2nd Semester
* ART 186 Collections Management 3
ART 296 Museum Internship 3
Topics in Museum Studies 1
Total Credits 7

Total Credits For Program 12

Notes and Additional Curriculum Options
1. Three-week, 1-credit ART 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.

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 placements 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 Options</th>
<th>Credits</th>
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<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>
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<tr>
<td><strong>Total Credits</strong></td>
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#### 2nd Semester

<table>
<thead>
<tr>
<th>Course Options</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>
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<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 placements 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>
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</thead>
<tbody>
<tr>
<td>ITE 115 Introduction to Computer Applications</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>and Concepts</td>
<td></td>
<td></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>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<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>
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</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).

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 placements 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>
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</thead>
<tbody>
<tr>
<td>ITE 115 Introduction to Computer Software</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>Applications</td>
<td></td>
<td></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>
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<td><strong>Total Credits</strong></td>
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<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tbody>
<tr>
<td>ITE 215 Advanced Computer Applications</td>
<td>3</td>
<td>See Note 1.</td>
</tr>
<tr>
<td>and Integration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITE 290 Coordinated Internship</td>
<td>1</td>
<td></td>
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<tr>
<td>ITP 160 Introduction to Game Design and Development</td>
<td>3</td>
<td></td>
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<tr>
<td>ITP 210 Visual Basic Programming II or ITP 220</td>
<td>3</td>
<td></td>
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<tr>
<td>Java Programming II</td>
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<td>ITP 251 Systems Analysis and Design</td>
<td>3</td>
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<td><strong>Total Credits</strong></td>
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</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 Services: 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. Students must also complete placements 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>
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</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>MTH 103 Applied Technical Mathematics I</td>
<td>3</td>
<td>MTH 104</td>
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<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</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>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</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>
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</table>

**Total Credits For Program**

21

**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).

Small Business Management

Career Studies Certificate (C.S.C.)

**Purpose**
Provides management skills specific to small businesses.

**Program Requirements and Special Conditions**
Students must meet JTCC admission requirements. Students must also complete placements 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>
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</thead>
<tbody>
<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>
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<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 205 Business Communications</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>
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</tbody>
</table>

**Total Credits for Program**

21

**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).
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 placements 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>Courses</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
<tbody>
<tr>
<td><strong>1st Semester</strong></td>
<td>HMS 100 Introduction to Human Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HMS 251 Substance Abuse I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<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></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
<td>HMS 252 Substance Abuse II</td>
<td>3</td>
<td>ADJ 228</td>
</tr>
<tr>
<td></td>
<td>HMS 258 Case Management and Substance Abuse</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<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></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>3rd Semester</strong></td>
<td>MEN 190 Coordinated Practice</td>
<td>3</td>
<td>MEN 290. See Notes 4 and 7.</td>
</tr>
<tr>
<td></td>
<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>
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</tr>
<tr>
<td><strong>Total Credits For Program</strong></td>
<td></td>
<td>24</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 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. 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 entering the public or private sectors of human services will be subjected to criminal background 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 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 placements 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></td>
</tr>
<tr>
<td>Business Elective</td>
<td>3</td>
<td></td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 205 Business Communications</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></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**
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 employment and advancement in surveying.

**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>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>
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<td><strong>Total Credits</strong></td>
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<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>CAD 260 Computer Applications for Surveyors and Technicians</td>
<td>3</td>
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<tr>
<td><strong>Total Credits</strong></td>
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**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).
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>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 131 Fundamentals of Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 217 Electronic Graphic Design I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ART 263 Interactive Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 141 Typography I</td>
<td>4</td>
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</tr>
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<td><strong>Total Credits</strong></td>
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<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
<tbody>
<tr>
<td>ART 218 Electronic Graphic Design II</td>
<td>4</td>
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<tr>
<td>ART 250 History of Design</td>
<td>3</td>
<td></td>
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<tr>
<td>ART 264 Interactive Design II</td>
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<td>ART/PHT Elective</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</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 804-1509 (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>1st Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL 116 Oxyfuel Welding</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>WEL 120 Introduction to Welding</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>WEL 123 Shielded Metal Arc Welding (Basic)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WEL 150 Welding Drawing and Interpretation</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<thead>
<tr>
<th>2nd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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</thead>
<tbody>
<tr>
<td>IND 105 Welding Nondestructive Inspection and Testing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WEL 130 Inert Gas Welding</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WEL 160 Gas Metal Arc Welding</td>
<td>3</td>
<td></td>
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<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>3rd Semester</th>
<th>Credits</th>
<th>Standard Course Options</th>
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<tbody>
<tr>
<td>WEL 175 Semi-Automatic Processes</td>
<td>3</td>
<td></td>
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<tr>
<td>WEL 199 Supervised Study</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>6</strong></td>
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</tbody>
</table>

**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 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.

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**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.

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**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 drawing 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)  
Presents 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, 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, 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 – 112  
**Introduction to the Arts I – II**  
(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)
Explores the student to the rich history of temporal imagery from the invention of the zootrope 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. Lecture: 3 hours per week.

ART 186
Collections Management
(3 credits)
Discusses the fundamentals of collections policy, deaccessioning, appraisal, and curatorial management. Lecture: 3 hours 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 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 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 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 3 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 205
**General Microbiology**
(4 credits)
Examines morphology, genetics, physiology, ecology, and control of microorganisms. Emphasizes application of microbiological techniques to selected fields. Prerequisites: one year of college biology and one year of college chemistry or divisional approval. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 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 231
**Human Anatomy and Physiology I**
(4 credits)
Integrates the study of gross and microscopic anatomy with physiology, emphasizing the analysis and interpretation of physiological data. Prerequisites one year of college biology and one year of college chemistry (can be BIO 101, BIO 102, BIO 110, or BIO 120 and CHM 101, CHM 102, CHM 111 or CHM 112) or divisional approval. Part I of II. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 hours per week.

BIO 232
**Human Anatomy and Physiology II**
(4 credits)
Integrates the study of gross and microscopic anatomy with physiology, emphasizing the analysis and interpretation of physiological data. Prerequisites one year of college biology and one year of college chemistry or divisional approval. Part II of II. Lecture: 3 hours. Recitation and laboratory: 3 hours. Total: 6 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.

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**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, checkbook 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 theatre 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 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 functions 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 principle of costuming 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.

Computer-Aided Drafting and Design

CAD 151
Engineering Drawing Fundamentals I
(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 I of II. (Credit will not be awarded for both CAD 151 and DRF 151.) Lecture: 1 hour. Laboratory: 4 hours. Total: 5 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 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 165
Tap Dance
(1 credit)
Teaches the basic footwork, patterns, and coinciding body movements to various rhythms. Includes development of choreographic routines. 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 uses 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.
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 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: 3 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 Medicine Technician Basic. Prerequisite: EMS 100/ equivalent. 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. 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 II
(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 Medicine 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 1 – 4 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 the EMS response and mitigation of specialized incidents such as hazardous materials, Weapons of Mass Destruction, natural disasters, and other specialized multi-casualty incidents. Lecture: 3 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 1 – 4 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: ENF 1 or ENF 2. 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.

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**ENF 1**  
**Preparating 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**  
**Preparating 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**  
**Preparating 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.

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**Environmental Science**

**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.

Geography

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.

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 205**  
**Sex Roles in Contemporary America**  
(3 credits)  
Explores the changing roles of the sexes that have occurred from 1900 to the present. Includes sexual and social mores, inhibitions towards sexuality, and the influence of society and religion. Discusses psychological and emotional implications regarding sexuality for males and females and how to deal with them. 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 226
AIDS Awareness
(2 credits)
Provides basic understanding of Acquired Immune Deficiency Syndrome (AIDS), AIDS-Related Complex (ARC) and Human Immunodeficiency Virus (HIV) Infection. Includes information on the etiology of AIDS, historical perspectives, signs and symptoms, HIV antibody testing, safer sex guidelines, AIDS in the workplace (including health care settings), psychosocial issues, death and dying issues, homophobia and HIV transmission and prevention. Lecture: 2 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 240
Consumer Health Education
(3 credits)
Focuses on health fads, myths, misunderstandings, quackeries, deceptions, and fraudulent health practices. Includes selecting and purchasing health products, services, consumer protections, and in the planning and financing of medical care. 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 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. 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 277
The American Experience in Vietnam
(3 credits)
Analyzes American involvement in Vietnam from World War II with emphasis on the presidencies of Johnson, Nixon and Ford. 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.

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)
Focuses 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 231 – 232
Survey of Asian Culture I – II
(3 credits each)
Studies thought, values and arts of Asian culture, integrating art, architecture, literature, music and philosophy of various cultures, including two or more of the following: India, China, Japan and Southeast Asia. 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 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 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. 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. 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. Prerequisite: ITE 115. 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. 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. 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: 3 hours 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. Prerequisite: ITE 115. 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. 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. 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. 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.S09, 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. 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. 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. 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)  
Develops the 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. Prerequisite: LGL 110. 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. Prerequisite: 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. Prerequisite: LGL 110. 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. Prerequisite: LGL 110. 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. Prerequisite: LGL 110. 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. Prerequisite: LGL 110. 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. Prerequisite: LGL 110. 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. Prerequisite: LGL 110. 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 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.
**MAC 295**  
**EDM and CAM**  
(2 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: 2 hours. Laboratory (if applicable): 1 hour. Total: 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 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 168.) 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 appropriate score on VPT placement. (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, MTH 166, Modules 1-9 or SAT of 520. (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 173. (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 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: MTE 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 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: MTE 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 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 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: MTE 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.
Course Descriptions

**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)  
Presents 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 112**  
*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. 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.

NAS 130
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 per week. Recitation and laboratory 3 hours. Total: 6 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 118
First Level Nursing II
(8 credits)
Focuses on the nursing care of individuals and/or families throughout the lifespan experiencing changes along the health/illness continuum that are common, well-defined, and have predictable outcomes. Content includes math computational skills, basic computer instruction related to the delivery of nursing care; assessment and nursing care of the child; nursing care of productive health/disorders, pre/intra/postnatal child bearing family and musculoskeletal and neurological disorders. Provides supervised learning experiences in college nursing laboratories and/or cooperating agencies. Lecture: 4 hours. Laboratory: 12 hours. Total: 16 hours per week.

NUR 216
Integrated Concepts II
(9 credits)
Focuses on nursing care of individuals/families requiring the integration of complex concepts of nursing related to psychiatric and medical/surgical disorders throughout the lifespan. Includes math computational skills, basic computer instruction related to the delivery of nursing care; psychiatric, respiratory, regulatory, endocrine and hematological disorders. Uses all concepts of the nursing process with increasing degrees of skill. Provides supervised learning experiences in college nursing laboratories and/or cooperating agencies. Prerequisites determined by local college. Lecture: 4 hours. Laboratory: 15 hours. Total: 19 hours per week.

NUR 217
Integrated Concepts III
(9 credits)
Focuses on nursing care of individuals/families requiring the integration concepts related to nursing care of complex medical/surgical disorders. Includes math computational skills, basic computer instruction related to the delivery of nursing care; sensory, neurological, integumentary, renal and cardiovascular disorders; and, nursing care of clients experiencing major trauma. Uses all concepts of the nursing process with increasing degrees of skill. Provides supervised learning experiences in college nursing laboratories and/or cooperating agencies. Prerequisites determined by local college. Lecture: 4 hours. Laboratory: 15 hours. Total: 19 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, sensor, 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.

NUR 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.

Philosophy

PHI 101 – 102
Introduction to Philosophy I – II
(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 115
Practical Reasoning
(3 credits)
Studies informal logic and language techniques as they relate to reasoning and argument. Provides practice in analyzing arguments and constructing sound arguments. 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 225
Selected Problems in Applied Ethics
(3 credits)
Analyzes and discusses significant contemporary ethical issues and problems existing throughout the various professions such as business, medicine, law, education, journalism, and public affairs. May be repeated for credit. 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.

PHI 227
Bio-Medical Ethics
(3 credits)
Examines the ethical implications of specific biomedical issues in the context of major ethical systems. Lecture: 3 hours per week.

PHI 265
Philosophy of Religion
(3 credits)
Examines problems raised by arguments for and against the existence of God and discusses such topics as the nature of God, the nature of religious experience, the problem of evil, religious truth and language, immortality, miracles, spirituality, and the relation between philosophy and theology. Lecture: 3 hours per week.

PHI 276
Women and Western Philosophy
(3 credits)
Studies the concept, role and clue of women in the canon of Western Philosophy from Plato to contemporary philosophy. Discusses controversies in feminist social ethics, including marketing femininity, pornography, censorship, women in the work force and women’s fertility. 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.
PH 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.

PH 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.

PH 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.

PH 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.

PH 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.

PH 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.

PH 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.

PH 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.

PH 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.

PH 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.

PH 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.

PH 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 – 102**  
*Fundamentals of Physical Activity I – II*  
(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*  
(2 credits)  
Develops cardiovascular fitness though activities designed to elevate and sustain heart rates appropriate to age and physical condition. Part I of II. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

**PED 109**  
*Yoga*  
(2 credits)  
Focuses on the forms of yoga training emphasizing flexibility. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

**PED 111 – 112**  
*Weight Training I – II*  
(2 credits each)  
Focuses on muscular strength and endurance training through individualized workout programs. Teaches appropriate use of weight equipment. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 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 a 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 134**  
*Golf II*  
(1 credit)  
Teaches basic skills of golf, rules, etiquette, scoring, terminology, equipment selection and use, and strategy. Part II of II. Laboratory: 2 hours. Total: 2 hours per week.

**PED 139**  
*Ice Skating*  
(2 credits)  
Introduces the skills of figure skating with emphasis on form. Includes equipment selection and safety. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 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*  
(2 credits)  
Introduces skills, techniques, strategies, rules, and scoring. Lecture: 1 hour. Laboratory: 2 hours. Total: 3 hours per week.

**PED 171 – 172**  
*Ballroom Dance I – II*  
(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 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 100**  
**Principles of Applied Psychology**  
(3 credits)  
Introduces the general principles of psychology as they are applied to work, relationships, and growth. Includes perception, learning, development, motivation, emotion, therapy, communication, attitudes. Lecture: 3 hours per week.

**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. Corequisite: PSY 203. Prerequisite: Eligible for ENG 111. Lecture: 3 hours per week.

**PSY 203**  
Principles of Psychology Laboratory  
(1 credit)  
Teaches the basic principles of behavioral research methods and analysis. Presents instruments, equipment, and research techniques used in psychological experimentation and evaluation. Corequisite: PSY 200. Prerequisite: Eligible for ENG 111. Laboratory: 2 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.

Sociology

**SOC 200**  
**Principles to 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.
### Course Descriptions

#### 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.
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John Tyler Community College

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Wells Fargo Private Bank

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District Representative 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.
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M.S.Ed., Ed.D., Northern Illinois University

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B.S., Virginia Commonwealth University

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B.S., United States Naval Academy; M.S., United States Naval Postgraduate School

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Zador, James M.
Web Developer
B.A., Mercyhurst College

Zhai, Jianhua
Web Developer
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Professional in Human Resources (PHR)

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Traylor, Joel  
Videographer/Photographer  
B.A., James Madison University

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A.A.S., A.A.&S., John Tyler Community College

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Enrollment Services Specialist

Harvey, Marilyn M.  
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Enrollment Services Specialist

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Tutton, Rusty  
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Byerly, Wendy  
Lead Call Center Representative  
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B.A., Auburn University; M.S.W., M.Ed., Virginia Commonwealth University

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Dean, Randy
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B.S., James Madison University

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Johnson, Wanda
Student Services Specialist
A.A., John Tyler Community College

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<td>Ragsdale, Joseph M.</td>
<td>Mail Courier</td>
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<tr>
<td>Robinson, Roy</td>
<td>Housekeeping Supervisor</td>
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<tr>
<td>Robinson, Russell W.</td>
<td>Postal Specialist A.A.S., John Tyler Community College</td>
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<tr>
<td>York, Christopher W.</td>
<td>HVAC Technician</td>
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<td>Midlothian</td>
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<td>BUILDING AND GROUNDS SUPERVISOR – MIDLOTHIAN</td>
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<td>Williams, John R.</td>
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<tr>
<td>STAFF</td>
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<tr>
<td>Albright III, James E.</td>
<td>Grounds Maintenance</td>
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<tr>
<td>Beasley, Crevante D.</td>
<td>Housekeeping Supervisor</td>
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<tr>
<td>Carter, Christie</td>
<td>Housekeeping Supervisor</td>
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<tr>
<td>Callis, Thomas M.</td>
<td>HVAC Technician</td>
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<tr>
<td>Elrod, Terrence L.</td>
<td>Grounds Maintenance</td>
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<tr>
<td>Harper, Ronnie T.</td>
<td>Custodial Services Worker</td>
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<td>Jones, Melvin</td>
<td>Postal Specialist</td>
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<td>Moore, John W.</td>
<td>Housekeeping Worker</td>
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<tr>
<td>Street, Michael</td>
<td>Grounds Maintenance</td>
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<tr>
<td>White, Ralph J.</td>
<td>Custodial Services Worker</td>
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<tr>
<td>Williams, Angela M.</td>
<td>Administrative Assistant A.A.S., Strayer University</td>
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<td>Information Technology</td>
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<td>DIRECTOR</td>
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<td>Rubes, F. Larry</td>
<td>A.A.S., W.W. Holding Technical Institute</td>
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<td>STAFF</td>
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<tr>
<td>Abu-Saleh, Emad M.</td>
<td>Computer Support Specialist A.A.S. South Central Technical College</td>
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<td>Blackwell, Scott W.</td>
<td>Systems Engineer B.A., Roanoke College</td>
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<tr>
<td>Carwile, Vicky L.</td>
<td>Information Security Officer</td>
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<tr>
<td>Chaffin, Penny</td>
<td>Computer Lab Technician A.A.S., John Tyler Community College</td>
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<tr>
<td>Chaoul, Michel F.</td>
<td>Programmer/Analyst B.S., Lebanese American University</td>
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<tr>
<td>Financial Aid</td>
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<tr>
<td>DIRECTOR</td>
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<tr>
<td>Jones, Tony G.</td>
<td>B.S., Virginia State University; M.S., Central Michigan University</td>
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</tbody>
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Art Educator and Independent Artist

Ms. Karen Gammon
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Ms. Kris Iden
Visual Arts Center

Ms. Pamela Turner
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Ms. Maruta Winebrenner
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