General Education

General education encompasses the common knowledge, skills and attitudes required by each individual to be effective as a person, worker, consumer and citizen. Programs of study in transfer curricula and occupational technical programs are designed to promote the achievement of the following general education competencies established by the Virginia Community College System. Degree graduates will demonstrate the ability to:

Area 1: Communication
1.1 understand and interpret complex materials
1.2 assimilate, organize, develop, and present an idea formally and informally
1.3 use Standard English
1.4 use appropriate verbal and non-verbal responses in interpersonal relations and group discussions
1.5 use listening skills
1.6 recognize the role of culture in communication

Area 2: Critical Thinking
2.1 discriminate among degrees of credibility, accuracy, and reliability of inferences drawn from given data
2.2 recognize parallels, assumptions, or presuppositions in any given source of information
2.3 evaluate the strengths and relevance of arguments on a particular question or issue
2.4 weigh evidence and decide if generalizations or conclusions based on the given data are warranted
2.5 determine whether certain conclusions or consequences are supported by the information provided
2.6 use problem solving skills

Area 3: Cultural and Social Understanding
3.1 assess the impact that social institutions have on individuals and culture—past, present, and future
3.2 describe their own as well as others’ personal ethical systems and values within social institutions
3.3 recognize the impact that arts and humanities have upon individuals and cultures
3.4 recognize the role of language in social and cultural contexts
3.5 recognize the interdependence of distinctive world-wide social, economic, geo-political, and cultural systems

Area 4: Information Literacy
4.1 determine the nature and extent of the information needed
4.2 access needed information effectively and efficiently
4.3 evaluate information and its sources critically and incorporate selected information into his or her knowledge base
4.4 use information effectively, individually or as a member of a group, to accomplish a specific purpose
4.5 understand many of the economic, legal, and social issues surrounding the use of information and access and use information ethically and legally

Area 5: Personal Development
5.1 develop and/or refine personal wellness goals
5.2 develop and/or enhance the knowledge, skills, and understanding to make informed academic, social, personal, career, and interpersonal decisions

Area 6: Quantitative Reasoning
6.1 use logical and mathematical reasoning within the context of various disciplines
6.2 interpret and use mathematical formulas
6.3 interpret mathematical models such as graphs, tables and schematics and draw inferences from them
6.4 use graphical, symbolic, and numerical methods to analyze, organize, and interpret data
6.5 estimate and consider answers to mathematical problems in order to determine reasonableness
6.6 represent mathematical information numerically, symbolically, and visually, using graphs and charts

Area 7: Scientific Reasoning
7.1 generate an empirically evidenced and logical argument
7.2 distinguish a scientific argument from a non-scientific argument
7.3 reason by deduction, induction and analogy
7.4 distinguish between causal and correlational relationships
7.5 recognize methods of inquiry that lead to scientific knowledge
The Honors Program
The LFCC Honors Program is designed to challenge and reward students who are intellectually motivated and academically able through opportunities for in-depth study and interaction with like-minded students. A student may obtain honors credit by earning credit in an honors section, by fulfilling the honors component in a regular course as specified by the course professor or by completing a special one-credit honors seminar. A grade of A or B is required in a course or seminar in order to earn honors credit. Faculty recommendation or approval is required for enrollment in an honors seminar.

Honors credit is noted on the student’s transcript for each course or seminar in which it is earned. Graduating students with a GPA of 3.2 or higher, who have earned honors credit in at least three courses plus one honors seminar receive the title “Honors Program Scholar” which is designated on their transcript and diploma.

Developmental Studies
Developmental and remedial studies courses are offered to meet these needs:
1. prepare individuals for admission to occupational-technical and college transfer-university parallel programs in the community college
2. assist students already pursuing course work who are experiencing difficulties or want to improve their efficiency
3. provide an opportunity for individuals interested in improving their skills in particular areas but are not necessarily enrolled in a program

Students can enroll in courses to meet these three types of needs both during the regular school year and during the summer term.

Tech Prep
LFCC has a consortium of members representing each of the public school divisions in the service region, College representatives, and business and industry representatives. Tech Prep is incorporated in the Career Pathways initiative. All high school counselors are provided with Career Pathways information that details College programs of study and transition from high school.

eLearning

eLearning (which is an abbreviation for electronic learning) is sometimes referred to as distance learning. eLearning takes place when an instructor and students are separated by physical distance and various technologies are used to bridge the instructional gap. Lord Fairfax Community College (LFCC) offers eLearning in three basic formats: online, hybrid and compressed video.

Online
An online course is a course that uses the Internet and the World Wide Web (Web) exclusively to deliver content and does not have any activities that occur at a single designated time and specified physical location. Online courses are often referred to as Web-based courses. In these courses, 100 percent of the course content is delivered online either through synchronous (real-time) or asynchronous (students and instructor not necessarily online at the same time) communication. These courses allow students the flexibility of completing their coursework using connectivity provided through the Internet and Web. Students enrolled in these courses use a Blackboard course management system account and student e-mail account provided by the VCCS to access the course materials and communicate with and send assignments to their instructors. Some courses may require attendance for on-campus labs or proctored testing. Such requirements are noted in the Class Schedule.

Hybrid Courses
Hybrid courses blend face-to-face instruction with online instruction and activities. In other words, a hybrid course is a course that uses the Internet and Web to deliver a portion of its content in lieu of traditional classroom hours. Internet access is required since much of the course material, activities, and interaction is accomplished through the VCCS Blackboard course management system.

Compressed Video (Live Interactive Television)
A compressed video course is sometimes referred to as a live interactive television course. These courses are live, real-time courses that meet on campus in a special distance learning classroom. Since the courses
are real-time, the days and times of the courses are fixed. A typical distance learning classroom is equipped with multi-way audio and video technology which includes a large display for student viewing, computer for instruction, document camera, DVD player, and phone/fax for support. Students who participate in a compressed video course may be at a physical location for instruction that is different from their where their instructor is facilitating the lesson. For example, the instructor may meet face-to-face with students at the Middletown Campus and televise the live lecture to students at the Fauquier Campus and/or the Luray-Page County Center. Synchronous real-time interaction is facilitated through the technology that connects all of the participating sites. In other words, students can hear, see, and speak to the instructor and the instructor, in turn, can interact with the students in the same manner.

Is Online Learning Right for You?
Although there are a number of benefits to online and hybrid learning, the success of students depends highly on good time management, self-discipline and self-motivation. Additionally, online and hybrid learners must have proficiency in computer literacy and competency. In order to help you be a more successful distance learning student, we strongly recommend you examine your learning preferences and technology-related skills before registering for an online or hybrid course.

Office of Workforce Solutions and Continuing Education
LFCC’s Office of Workforce Solutions and Continuing Education assists new businesses and entrepreneurs and addresses their training and educational needs. Customized and technical training, apprenticeship related instruction, Work Keys profiles and assessments, on-site computer training, computer-based training (CBT), small business assistance and pre-employment assessment are some of the many services provided. The coordinators of business and industry training, Small Business Development Centers and work-based learning, along with the assistant vice president of workforce solutions and continuing education, vice president of academic and student affairs work together to serve business and industry.

Old Dominion University – TELETECHNET
LFCC’s Fauquier and Middletown Campuses serve as hosts for Old Dominion University’s (ODU) TELETECHNET program. The TELETECHNET program is an interactive distance education program that enables students throughout Virginia to earn undergraduate and master’s degrees from a fully accredited university without leaving their areas of residence. TELETECHNET students complete their first two years of college through the host site, LFCC, and then transfer to ODU to complete the remaining course work required for a bachelor’s degree. Courses are broadcast live from the main campus of ODU and are received through satellite technology at LFCC’s campuses. Students interested in taking TELETECHNET courses may consult with the ODU site directors at the Fauquier and Middletown Campuses.
Approved Electives

Students planning to transfer to a four-year institution may select humanities or social science electives from any of the following lists of courses. Transfer students should determine which of the following courses the transfer institution will accept. (Some courses may require prerequisites.)

Approved Humanities Transfer Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>VCCS Policy Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 100</td>
<td>Art Appreciation</td>
<td></td>
</tr>
<tr>
<td>ART 101-102</td>
<td>History and Appreciation of Art I and II</td>
<td></td>
</tr>
<tr>
<td>ART 111-112</td>
<td>Introduction to the Arts I and II</td>
<td></td>
</tr>
<tr>
<td>ART 283-284</td>
<td>Computer Graphics I and II</td>
<td></td>
</tr>
<tr>
<td>ENG 241-242</td>
<td>Survey of American Literature I and II</td>
<td></td>
</tr>
<tr>
<td>ENG 243-244</td>
<td>Survey of English Literature I and II</td>
<td></td>
</tr>
<tr>
<td>ENG 251-252</td>
<td>Survey of World Literature I and II</td>
<td></td>
</tr>
<tr>
<td>ENG 255</td>
<td>Major Writers in World Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 295</td>
<td>Studies in American Literature</td>
<td></td>
</tr>
<tr>
<td>FRE 101-102</td>
<td>Beginning French I and II</td>
<td></td>
</tr>
<tr>
<td>FRE 201-202</td>
<td>Intermediate French I and II</td>
<td></td>
</tr>
<tr>
<td>GER 101-102</td>
<td>Beginning German I and II</td>
<td></td>
</tr>
<tr>
<td>GER 201-202</td>
<td>Intermediate German I and II</td>
<td></td>
</tr>
<tr>
<td>HUM</td>
<td>All courses with this prefix</td>
<td></td>
</tr>
<tr>
<td>HIS 295</td>
<td>Studies in United States History</td>
<td></td>
</tr>
<tr>
<td>ITA</td>
<td>All courses with this prefix</td>
<td></td>
</tr>
</tbody>
</table>
Students who may demonstrate proficiency in the core computer competencies. Students completing a basic computer proficiency course, fulfilling computer competency requirements at LFCC, or taking ITE 115 in computer literacy and competency, may demonstrate proficiency in using a Windows operating system along with word processing, spreadsheet, database, presentation, and communications applications. Students may then select an appropriate elective to complete the required credit hours for their degree.

**Computer Competency Testing**

LFCC requires many degree-seeking students to demonstrate proficiency in computer operations and software applications. Students may take ITE 115 in computer literacy and competency. Students may demonstrate proficiency in core computer competencies by passing each of the three sections of the IC³: Internet and Computing Core Certification (Computer Competency Certification Exam). The three sections cover topics in Computing Fundamentals, Key Applications, and Living Online. Each section requires the purchase of an exam voucher. In the event of a student not passing a section, two retakes are allowed, with the purchase of additional vouchers. There is no waiting period required for the initial retake and a mandatory seven day waiting period for the second retake. Students should allow approximately three hours to complete all three exams.

Individuals seeking IC³ certification are required to take and pass all three IC³ exam sections. Each section must receive a passing score to achieve the LFCC computer literacy requirement. If students don’t pass the exam or if they feel that they need to improve their computer skills, they must take a computer course.

However, after passing the IC³ exam, students neither earn college credit for exam certification nor fulfill computer competency requirements at transferring universities or colleges. Students who successfully demonstrate proficiency may then select an appropriate elective to complete the required credit hours for their degree.

**Courses Requiring Reading Prerequisite**

Many LFCC courses require a reading level prerequisite. Students’ placement test scores may indicate the need to satisfactorily complete developmental reading instruction before enrolling in these courses. To determine whether a reading prerequisite applies to a specific course, see Course Descriptions beginning on page 131.

**Core Computer Competency Requirements**

**Overview**

A minimum level of proficiency in the use of computers and various software applications is essential in today’s technological world. Therefore, LFCC requires each degree-seeking student to demonstrate proficiency in using a Windows-based operating system, along with components of an integrated productivity software package, including word processing, spreadsheet, database, presentation and/or communication applications.

**Requirements:**

The majority of the College’s associate degrees require that students complete a computer course such as ITE 115 - Basic Computer Literacy or equivalent. In lieu of completing a basic computer proficiency course, students may demonstrate proficiency in the core computer competencies. Students who successfully demonstrate proficiency in using a Windows-based operating system along with word processing, spreadsheet, database, presentation, and communications applications may then select an appropriate elective to complete the required credit hours for their degree.

**Approved Social Science Transfer Electives**

- ECO 120 Survey of Economics
- ECO 201-202 Principles of Economics I and II
- GEO 210 People and the Land: An Introduction to Cultural Geography
- GEO 221-222 Regions of the World I and II
- HIS 111-112 History of World Civilization I and II
- HIS 121-122 United States History I and II
- PLS 211-212 United States Government I and II
- PSY All courses with this prefix
- SOC All courses with this prefix

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However, after passing the IC³ exam, students neither earn college credit for exam certification nor fulfill computer competency requirements at transferring universities or colleges. Students who successfully demonstrate proficiency may then select an appropriate elective to complete the required credit hours for their degree.

**Classification of Programs**

Programs offered by the College may be classified both by their purpose and by the degree or certificate to which they lead. College-parallel transfer programs lead to an associate of arts and sciences (AA&S) degree. They are intended to prepare students for transfer to four-year baccalaureate programs.
Occupational-technical programs, intended to prepare students for specific occupations, lead to an associate of applied science (AAS) degree, a certificate (C) or a career studies certificate (CSC). Following completion of these programs, students may choose to enter the workforce or pursue additional education or training options.

The College reserves the right to withdraw program offerings if there is not sufficient demand or for other appropriate reasons.

The programs of study offered at LFCC are as follows:

**College Transfer Two-Year Degree Programs:**
- Associate of Arts and Sciences Degree in Business Administration
- Associate of Arts and Sciences Degree in Education
- Associate of Applied Science Degree in Early Childhood Education
- Associate of Arts and Sciences Degree in General Studies
- Associate of Arts and Sciences Degree in Liberal Arts: Communication Specialization
- Associate of Arts and Sciences Degree in Liberal Arts: Fine Arts Specialization
- Associate of Arts and Sciences Degree in Liberal Arts: Philosophy and Religion Specialization
- Associate of Arts and Sciences Degree in Science Certificate in General Education

**Business Degrees and Certificates**
- Associate of Arts and Sciences Degree in Business Administration
- Associate of Applied Science Degree in Accounting
- Associate of Applied Science Degree in Management
- Associate of Applied Science Degree in Management: Business Information Technology Specialization
- Associate of Applied Science Degree in Management: Marketing Specialization
- Certificate in Technical Writing
- Career Studies Certificate: Entrepreneurship
- Career Studies Certificate: General Business
- Career Studies Certificate: Real Estate Sales
- Career Studies Certificate: Sales Management and Marketing
- Career Studies Certificate: Small Business Management
- Career Studies Certificate: Supervision

**Information Systems Technology Degrees and Certificates**
- Associate of Applied Science Degree in Information Systems Technology
- Associate of Applied Science Degree in Information Systems Technology: Database and Software Development Specialization
- Associate of Applied Science Degree in Information Systems Technology: Network Engineering Specialization
- Associate of Applied Science Degree in Information Systems Technology: Web Application Development Specialization
- Career Studies Certificate: Database Administration Specialist
- Career Studies Certificate: Information Technology Foundations
- Career Studies Certificate: Networking Engineering Professional
- Career Studies Certificate: Networking Specialist
- Career Studies Certificate: Web Design Specialist

**Engineering, Construction and Industrial Degrees and Certificates**
- Associate of Applied Science Degree in General Engineering Technology: Mechanical Engineering Technology
- Associate of Applied Science Degree in General Engineering Technology: Civil Engineering Technology Specialization
- Associate of Applied Science Degree in General Engineering Technology: Computer-Aided Drafting Specialization
- Associate of Applied Science Degree in General Engineering Technology: Industrial Electricity and Controls Technology Specialization
- Associate of Applied Science Degree in General Engineering Technology: Technical Operations
- Career Studies Certificate: Construction Technology
- Career Studies Certificate: Drafting
- Career Studies Certificate: Electrical Technician
- Career Studies Certificate: HVAC
- Career Studies Certificate: Industrial Design
- Career Studies Certificate: Industrial Maintenance Technician
- Career Studies Certificate: Sustainability and Green Construction
Administrative Support Technology Degrees and Certificates

Associate of Applied Science Degree in Administrative Support Technology
Associate of Applied Science Degree in Administrative Support Technology:
  Administrative Assistant Specialization
Associate of Applied Science Degree in Administrative Support Technology:
  Desktop Publishing Specialization
Certificate in Legal Assistant/Paralegal Studies
Certificate in Medical Billing/Coding
Certificate in Medical Secretary/Transcription
Certificate in Office Systems Assistant
Career Studies Certificate: Information Processing Technician
Certificate in Medical Billing/Coding
Certificate in Secretary/Transcription
Certificate in Practical Nursing
Certificate in Surgical Technology (PVCC)
Career Studies Certificate: Emergency Medical Technician – Intermediate
Career Studies Certificate: Emergency Medical Technician – Enhanced
Career Studies Certificate: Phlebotomy

Fine Arts Degrees and Certificates

Associate of Arts and Sciences Degree in Liberal Arts:
  Fine Arts Specialization
Career Studies Certificate: Fine Arts
Career Studies Certificate: Nature and Outdoor Photography

Other Career Certificates

Career Studies Certificate: Early Childhood Education
Career Studies Certificate: Interior Design
Career Studies Certificate: Kitchen and Bath Design
Career Studies Certificate: Police Science
Career Studies Certificate: Sign Communications

Health Professions Degrees and Certificates

Associate of Applied Science in Emergency Medical Services
Associate of Applied Science Degree in Nursing
Associate of Applied Science Degree in LPN Transition
Associate of Applied Science Degree in Dental Hygiene (VWCC)
Certificate in Health Science
Certificate in Medical Billing/Coding
Certificate in Secretary/Transcription
Certificate in Practical Nursing
Certificate in Surgical Technology (PVCC)
Career Studies Certificate: Emergency Medical Technician – Intermediate
Career Studies Certificate: Emergency Medical Technician – Enhanced
Career Studies Certificate: Phlebotomy

Career Studies Certificate: Early Childhood Education
Career Studies Certificate: Interior Design
Career Studies Certificate: Kitchen and Bath Design
Career Studies Certificate: Police Science
Career Studies Certificate: Sign Communications