

Virginia Western Community College
College Catalog
2014-15

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Surgical Technology

Career Studies Certificate

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IT: Network and Security Administration
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Description of Courses

State Board Membership

Local Advisory Board Membership

Virginia Western Educational Foundation Board Membership

Curriculum Advisory Committee Membership

Disclaimer

Virginia Western Community College provides its website, 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 registrations of virginiawestern.edu, the associated marketing site of <http://www.wheresyourthere.com>, and the associated social media sites of <http://www.facebook.com/virginiawestern>, <http://www.twitter.com/virginiawestern>, and <http://www.youtube.com/virginiawestern> 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 college advisor. 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. Supplements may be issued to this catalog when deemed necessary by the college.

Links or references to other materials and websites 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. It is the policy of the Virginia Community College System and Virginia Western Community College to maintain and promote equal employment and educational opportunities without regard to race, color, sex, age, religion, disability, national origin, or other non-merit factors. For further information, contact the Title IX Coordinator in Chapman Hall, Room C102, phone (540) 857-6348 or the ADA/Section 504 Coordinator, at REACH Student Support Services, W212 phone (540) 857-7286. TTY number is (800) 855-2880 all users 711.

VIRGINIA WESTERN COMMUNITY COLLEGE
Academic Calendar for 2014-2015

FALL SEMESTER 2014

16-Week Session

First Day to Enroll	April 18 (currently enrolled) June 23 (open)
First Day of Classes	August 21
Last Day to Register/Add a Class	August 27
Labor Day Holiday	September 1
Last Day to Drop and Receive Refund	September 8
Last Day to Withdraw Without Grade Penalty	October 26
Last Day to Apply for Fall Graduation	November 14
Faculty In-Service Day - No Day or Night Classes	November 25
Faculty Research Day - No Day or Night Classes	November 26
Thanksgiving Holidays	November 27-30
Last Day of Classes	December 10
Final Examinations	December 11 - 17
Last Grade Reporting Day (9:30 a.m.)	December 19

SPRING SEMESTER 2015

16-Week Session

First Day to Enroll	November 17
First Day of Classes	January 12
Last Day to Register/Add a Class	January 18
Last Day to Drop and Receive Refund	January 29
Last Day to Apply for Spring Graduation	February 20
Spring Break/Makeup*	March 8 - 15
Last Day to Withdraw Without Grade Penalty	March 26
Last Day of Classes	May 2
Final Examinations	May 4 – May 9
Last Grade Reporting Day (9:30 a.m.)	May 11
Commencement Ceremony	May 15

* Spring Break may be used as makeup days if too many instructional days are missed due to inclement weather.

SUMMER TERM 2015

10-Week Session

First Day to Enroll	April 13
First Day of Classes	May 18
Last Day to Register/Add a Class	May 25
Memorial Day Holiday.....	May 25
Last Day to Drop and Receive a Refund	May 28
Break (no classes)	June 23
Last Day to Apply for Graduation This Term	June 26
Last Day to Withdraw Without Grade Penalty	June 29
Independence Day.....	(observed) July 3
Last Day of Classes	July 29
Last Grade Reporting Day (9:30 a.m.).....	July 31

First 5-Week Session

First Day of Classes	May 18
Last Day to Register/Add a Class	May 20
Memorial Day Holiday.....	May 25
Last Day to Drop and Receive a Refund	May 26
Last Day to Withdraw Without Grade Penalty	June 7
Last Day of Classes	June 22
Last Day to Apply for Graduation.....	June 26
Last Grade Reporting Day (9:30 a.m.).....	July 31

Second 5-Week Session

First Day of Classes	June 24
Last Day to Apply for Graduation This Term	June 26
Last Day to Register/Add a Class	June 28
Last Day to Drop and Receive a Refund	June 29
Independence Day	(observed) July 3
Last Day to Withdraw Without Grade Penalty	July 14
Last Day of Classes	July 29
Last Grade Reporting Day (9:30 a.m.).....	July 31

VIRGINIA WESTERN :: ABOUT VWCC

VIRGINIA WESTERN COMMUNITY COLLEGE

Virginia Western Community College is a two-year public institution of higher education operating under a statewide system of community colleges. The College operates under the policies established by the State Board for Community Colleges and the Virginia Western Community College Board.

The service region of the College includes Roanoke, Salem, Roanoke County, Craig County, southern Botetourt County, and northern Franklin County. Day, evening, and weekend classes are provided on a 70-acre campus located in Southwest Roanoke. Classes are also offered at off-campus locations in the area. The College was established in 1966 and has grown from an initial enrollment of 1,352 to a current enrollment of over 12,000.

[Click here for a campus map and driving directions.](#)

CONTACT INFORMATION

Phone number: 540-857-VWCC(8922)

Mailing address:

Virginia Western Community College
P.O. Box 14007
Roanoke, VA 24038-4007, USA

For specific department and personnel contact information, please refer to our [directory](#).

You may also use [this form](#) to request more information about VWCC.

MISSION, VISION, VALUES & GOALS

MISSION

Virginia Western Community College provides affordable, accessible, and quality educational opportunities and workforce training to individual, community and global needs.

VISION

As a student-oriented center for lifelong learning, Virginia Western Community College will meet the needs of our diverse community providing comprehensive educational programs and workforce development.

CORE VALUES

INTEGRITY

- Maintain the highest standards of honesty, fairness, and ethical conduct.

EXCELLENCE

- Encourage our students, faculty, and staff to strive for academic, professional, and personal excellence.
- Pursue continuous improvement and high quality in staffing, facilities, programs, and services.

SERVICE

- Foster a community that demonstrates care and support for students, faculty, staff, and the citizens of our service region.
- Promote service to others.

COMMUNITY

- Respect and appreciate all cultures, learning styles, and ideas that reflect the community we serve.
- Provide access to services and programs for all students who may benefit.
- Promote a safe and secure environment that facilitates student learning.

INSTITUTIONAL GOALS

In striving to fulfill its mission in the most effective way possible, the College established four institutional goals.

GOAL 1

Promote effective teaching and learning through quality instruction, programs, and services designed to meet the needs of a diverse body.

GOAL 2

Cultivate relationships and partnerships with the educational community, business, industry, and government to create educational a workforce development opportunities to support economic vitality.

GOAL 3

Practice sound stewardship of financial, physical, and technological resources to support high quality programs and services.

GOAL 4

Foster a safe and secure campus environment that is conducive to learning.

Reviewed by the Virginia Western Community College Local Board on September 18, 2013.

ACCREDITATIONS

Virginia Western Community College is accredited by the [Southern Association of Colleges and Schools Commission on Colleges \(http://www.sacscoc.org/\)](http://www.sacscoc.org/) to award associate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call (404) 679-4500 for questions about the accreditation of Virginia Western Community College. Normal inquiries, admission requirements, financial aid, educational programs, etc., should be addressed directly to Virginia Western and not to the Commission's office.

The College is a member of the [Virginia Community College System \(http://www.vccs.edu\)](http://www.vccs.edu) and is approved by the State Board of Community Colleges. Virginia Western is also approved by the [State Council of Higher Education for Virginia \(http://www.sche.edu\)](http://www.sche.edu). Certain curricula of the College are accredited and/or approved by specialized accrediting organizations:

- A.S. Business Administration, A.A.S. Accounting, A.A.S. Administrative Management Technology, A.A.S. Information Systems Technology and A.A.S. Management programs, including all program specializations, are accredited by the [Accreditation Council for Business Schools and Programs \(http://www.acbsp.org/\)](http://www.acbsp.org/).
 - A.A.S. Nursing and Certificate of Practical Nursing are approved by the [Virginia Board of Nursing \(http://www.dhp.virginia.gov/nursing/\)](http://www.dhp.virginia.gov/nursing/).
 - A.A.S. Radiography and Certificate of Radiation Oncology are accredited by the [Joint Review Committee on Education in Radiologic Technology \(http://www.jrcert.org/\)](http://www.jrcert.org/).
 - A.A.S. Dental Hygiene is accredited by the [American Dental Association Commission on Dental Accreditation \(http://www.ada.org/117.aspx\)](http://www.ada.org/117.aspx).
-

VISITING VIRGINIA WESTERN

Virginia Western is located on Colonial Avenue in Roanoke, Virginia. The address to use for GPS or other mapping programs (Mapque Google Maps, etc.) is:

**3094 Colonial Ave.
Roanoke, VA 24015 (<http://g.co/maps/q47as>)**

For information about hotels, attractions, shopping, events, restaurants, and more in the Roanoke Valley, please visit the **[Roanoke Valley Convention and Visitors Bureau web site \(<http://www.visitroanokeva.com/>\)](http://www.visitroanokeva.com/)**.

DIRECTIONS

FROM INTERSTATE I-81 (EXIT 143)

1. Take I-581/220 South to the Colonial Ave. exit (~ 8 miles).
2. Turn left at the stoplight at the end of the exit ramp.
3. VWCC is located on both sides of Colonial Ave. at the 3rd stoplight.

FROM ROUTE 419 (SW)

1. Coming from the Salem direction, turn left onto Colonial Ave.
2. Continue straight through the next stoplight.
3. VWCC is located on both sides of Colonial Ave. approximately 2 miles from Rt. 419.

FROM ROUTE 220 SOUTH

1. Take the Colonial Ave./Wonju St. exit.
2. Turn right at the end of the ramp and continue to the stoplight.
3. Turn left onto Colonial Ave.
4. Continue straight through the next stoplight.
5. VWCC is located on both sides of Colonial Ave in approximately 1 mile.

TO ADMISSIONS, RECORDS, FINANCIAL AID, AND ADVISING (CHAPMAN HALL)

1. From Colonial Avenue, turn onto Winding Way Drive.
2. Chapman Hall is located between the bookstore and the Community Arboretum.

PARKING

30-minute visitor spaces are available in Lots 1, 4, 5, and 7. Spaces are available in lots 1E and 11 for handicapped individuals. Visit park in other spaces with a permit obtained from the Cashier's Office, any Division Office, or the Police Office.

More detailed parking information can be found in our **[Safety & Security section](#)**.

CAMPUS MAP

Click the map for a larger version:



[Click here for a high-resolution campus map, suitable for printing. \(PDF\)](#)

[Click here for the ADA Campus Map](#)

WORKFORCE SOLUTIONS: YOUR KEY TO SUCCESS

WHAT DO WE DO?

The goal of Workforce Solutions is to provide continuing education, up-to-date training information, resources, and support services to existing businesses and the community, as well as to potential business and industry.

If your business, industry, or organization needs solution focused training our training specialists can meet with you to listen and assess needs. We provide training that is customized to meet your needs!

If you would like to help us gather information about staffing and training needs in our service region, please fill out this [Constant C survey \(http://survey.constantcontact.com/survey/a07e6w0o02thbqks9ht/start\)](http://survey.constantcontact.com/survey/a07e6w0o02thbqks9ht/start).

MAIN OFFICE

Thomas Center - Ground Floor
3074 Colonial Ave., SW
Roanoke, VA 24015

Phone: 540-857-6076

Fax: 540-857-7386

workforce@virginiawestern.edu

UPCOMING CLASSES & PROGRAMS

- [VWCC Quick Connect Welding Training & AWS Qualifications](#)
- [Upcoming Pharmacy Tech Program \(http://www.virginiawestern.edu/workforce/programs/pharmtech.php\)](http://www.virginiawestern.edu/workforce/programs/pharmtech.php)
- [Virginia Career Readiness Certificate \(CRC\) Overview \(http://www.youtube.com/watch?v=MQqNIpsMj3g&feature=related\)](http://www.youtube.com/watch?v=MQqNIpsMj3g&feature=related) (video)
- [Truck Driving - CDL Training \(http://www.virginiawestern.edu/workforce/programs/cdl.php\)](http://www.virginiawestern.edu/workforce/programs/cdl.php)
- [Basic Manufacturing Skills \(http://www.virginiawestern.edu/workforce/programs/basicmanufacturing.php\)](http://www.virginiawestern.edu/workforce/programs/basicmanufacturing.php)
- [Industrial Maintenance Technician \(http://www.virginiawestern.edu/workforce/programs/industrialmaintenancetech.php\)](http://www.virginiawestern.edu/workforce/programs/industrialmaintenancetech.php)

NEWS & EVENTS

Workforce is now on LinkedIn!

Please follow us for up-to-date information on Workforce classes, programs, and services. It's easy to do, simply search for Virginia Workforce Solutions on LinkedIn and click follow.

[Follow](#) 27

PROFESSIONAL AFFILIATIONS

[LERN \(http://www.lern.org/\)](http://www.lern.org/) | [NACCE \(http://www.nacce.com/\)](http://www.nacce.com/) | [NCATC \(http://www.ncatc.org/\)](http://www.ncatc.org/) | [NCCET \(http://www.nccet.org/\)](http://www.nccet.org/) | [Western Virginia Workforce Development Board \(http://www.westernvaworkforce.com/\)](http://www.westernvaworkforce.com/)

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-12 - GENERAL ADMISSIONS POLICY

Policy Number: I-12

Last Reviewed: January 14, 2014

Responsible Dept.: DEAN OF STUDENT SERVICES

In accordance with VCCS Policy 6.0.1, individuals are eligible for admission to Virginia Western Community College if they are high school graduates or the equivalent, or if they are eighteen years of age or older and able to benefit academically from study at the community college, as demonstrated by assessment in reading, writing, and mathematics. Minimum scores are noted in the chart below:

	VPT	ASSET
Reading	ENF 1	35
Writing	ENF 1	35
Mathematics	MTE 1	33

Students who fail to meet these criteria in reading, writing, and mathematics, regardless of high school diploma, will only be permitted to enroll in non-credit classes. Virginia Western reserves the right to require placement testing for any individual seeking to enroll in credit classes.

Virginia Western reserves the right to evaluate and document special cases and to refuse or revoke admission if the college determines that the applicant or student poses a threat, is a potential danger, is significantly disruptive to the college community, or if such refusal or revocation is considered to be in the best interest of the college. Virginia Western also reserves the right to refuse admission for applicants that have been expelled or suspended from, or determined to be a threat, potential danger, or significantly disruptive by, another college. Students whose admission is revoked after enrollment would be given due process through the college's Care Team committee.

Admission to Virginia Western does not guarantee admission to a particular curriculum. Individuals may be admitted as curricular or non-curricular students.

For all non-curricular students, a completed official application is required with social security number requested. Non-curricular students must satisfy all required course prerequisites and placement testing requirements before enrolling in specific college-level courses.

For all curricular students, a completed official application is required with social security number requested. Curricular students who have attended another college or university (other Virginia community colleges are not required) must submit an official transcript for evaluation. Curricular students seeking admission into a restricted program are required to submit official high school transcripts, copy of GED scores (if applicable), and official transcripts from all colleges attended (Virginia Western and other Virginia community colleges are not required).

12.0.1 Dual Enrollment (High School and Home School) Student Admissions

Although high school and home school students are not normally qualified for general admission, Virginia Western offers admission to those students who meet additional criteria. Dual enrollment is restricted to high school juniors and seniors and home school students studying at the high school junior or senior levels. Home school students must also provide a copy of a home school agreement approved by the school district, or a letter from the local school board, or a copy of the letter filed by the parent/legal guardian declaring home school for religious exemption. Documentation of parental permission is required for all dual enrollment students.

Because admitting freshman 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 by the college president or his designee is required for admitting freshman and sophomores. This approval is sought by completing the *Request for Special Circumstances Admission Form*. Other conditions, as deemed appropriate by the college president and/or the dean, may also apply.

All students admitted under this section must demonstrate readiness for college by meeting the criteria below. Students enrolling in a dual enrollment course must meet all course prerequisites.

Admission Criteria for Transfer Courses*

	VPT	ASSET	PSAT	SAT	ACT	SOL
Writing	ENG 111	43	50	500	21	N/A
Reading	ENG 111	42	50	500	21	N/A
Math	MTE 1	33	52	520	22	Algebra I- Pass

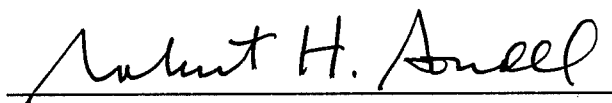
Admission for CTE Courses*

	VPT	ASSET	PSAT	SAT	ACT	SOL
Writing	ENF 1	35	50	500	21	N/A
Reading	ENF 1	35	50	500	21	N/A
Math	MTE 1	33	52	520	22	Algebra I- Pass

*Please see the Dual Enrollment Placement and Prerequisite Guide for additional information.

Updated: 12/2012; 1/2014

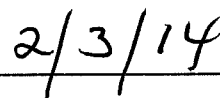
Approved by



Robert H. Sandel, Ed.D.

President

Date



STUDENT RECORDS

The Virginia Western Community College Records Office is responsible for the retention and maintenance of a complex system of records for all current and former students of the college. The Records Office also provides information and services to students, faculty, staff, and the general public necessary for the support of student records and enrollment services. It serves as a general resource to students regarding curricular and academic requirements.

The general responsibilities of the office include processing transcripts, maintenance of files and records, grade reporting for the college, coordination of graduation, student address and information changes, curriculum changes, enrollment verifications, and the monitoring and release of student information.

The primary goal of the Records Office is to promote a positive image of the college's enrollment and records functions. We are dedicated to providing quality service to all students, faculty/staff, and alumni of the college.

OFFICE HOURS

Monday - Thursday: 8:00 AM - 5:30 PM

Friday: 8:00 AM - 4:00 PM

OFFICE HOURS DURING REGISTRATION PERIODS

Monday - Thursday: 8:00 AM - 6:00 PM

Friday: 8:00 AM - 5:00 PM

CONTACT US

The Records Office is located in Chapman Hall, room C107 on the south side of campus. You may reach us by phone at 540-857-7236.

College Credit through Advanced Standing



Advanced Placement (AP)

Certified Professional Secretary (CPS)

College Level Examination Program (CLEP)

Credit-by-Exam

Early Childhood Development Program Exemptions

Firefighter Certificates

First Aid and CPR Certificates

International Baccalaureate (IB)

Military Training

Police Academies

Previous Completion Credit

Transfer Credit

VIRGINIA WESTERN

WE'LL TAKE YOU 

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What is Advanced Standing Credit

Advanced standing is the process of awarding a student credit for competency in subject matter that has been achieved through previous academic study or occupational experience. This may include, but is not limited to, credit for external advanced placement such as the Advanced Placement Program (AP), College Level Examination Program (CLEP), and International Baccalaureate (IB), credit for non-traditional professional certifications, credit for educational/training programs (military, industry, state and federal government) and credit for Cambridge Advanced (A/AS) examinations with scores of C or better.

Advanced standing policies at Virginia Western are consistent with the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) principles and with Virginia Community College System (VCCS) policy.

Virginia Western Community College may award credit for the following competencies:

- Advanced Placement (AP)
- Certified Prof. Secretary (CPS)
- College Level Exam Program (CLEP)
- Credit-by-Exam
- Early Childhood Develop. Exemptions
- Firefighter Certificates (Inactive 5/16/14)
- International Baccalaureate (IB)
- Military Training
- Police Academies
- Previous Completion
- Transfer Credit from Post-Secondary Institutions

Although advanced standing credit may satisfy VWCC curricular requirements, it will not necessarily transfer to another institution. Students desiring to transfer advanced standing credit should contact their four-year college of interest to determine its policy.

Curriculum Placed Students Only

To be eligible to apply for advanced standing credit, a student must be admitted to Virginia Western and officially placed in a program of study.

Advanced Standing/Graduation Requirements

There is no limit to the number of credits that may be awarded through advanced standing credit, with the exception of previous experiential learning credit. Credit for previous experiential learning may be awarded for no more than 25% of the credit hours required for a degree. In addition, credit achieved through advanced standing may not be used to fulfill the graduation residency requirement. A minimum of 25% of the credit required in the graduation curriculum must be earned at Virginia Western.

All accepted advanced standing credits will be acknowledged and recorded on the student's permanent record with the transferring agency or other source of credit identified. No unsuccessfully attempted advanced standing applications or examination results will be recorded on the student's permanent record.

Advanced Placement (AP)

Many area high schools offer AP or honors courses to their students giving them the opportunity to complete college-level work while attending high school. A minimum AP score of 3 is required for credit at Virginia Western. **An official copy of the AP transcript must be submitted** to the VWCC Records Office in order to obtain credit. Unofficial student copies or high school transcripts noting the AP credit will not be accepted for credit.

To learn more about AP and order an official transcript:

<https://apscore.collegeboard.org/scores/score-reporting>

**AP Services, PO Box 6671
Princeton, NJ 08541-6671
Phone: 888-225-5427
Fax: 610-290-8979**

Subject Exam	VWCC Course	Credits Awarded
Art—Studio/Drawing	ART 121-122	6
Art—Studio 2D Design	ART 131-132	6
Art—History	ART 101-102	6
Biology	BIO 101-102	8
Calculus AB	MTH 175	3
Calculus BC	MTH 176	3
Chemistry	CHM 111-112	8
Chinese Language and Culture	CHI 101-102	10
Computer Science A	CSC 201	4
Computer Science B (previously offered)*	CSC 201-202	8
English Language and Composition	ENG 111-112	6
English Literature and Composition	ENG 243-244	6
Environmental Science	ENV 121	4
French Language and Culture	FRE 101-102	8
French Literature (previously offered)*	FRE 201-202	6
German Language and Culture	GER 101-102	8
Government and Politics: Comparative	PLS 120	3
Government and Politics: United States	PLS 211-212	6
History, European	HIS 225-226	6
History, US	HIS 121-122	6
History, World	HIS 111-112	6
Human Geography	GEO 210	3
Italian Language and Culture	ITA 101-102	8

Advanced Placement (AP) cont'd

Subject Exam	VWCC Course	Credits Awarded
Japanese Language and Culture	JPN 101-102	8
Latin	LAT 101-102	6
Macroeconomics	ECO 201	3
Microeconomics	ECO 202	3
Music Theory	MUS 111-112	8
Physics B	PHY 201-202	8
Physics C: Electricity and Magnetism	PHY 122	4
Physics C: Mechanics	PHY 121	4
Psychology	PSY 200	3
Spanish Language	SPA 101-102	8
Spanish Literature and Culture	SPA 201-202	6
Statistics	MTH 157	3

*Credit for tests that are no longer offered may still be available, contact the Records office for more information at 857-7236.

Certified Professional Secretary (CPS)

The CPS/CAP examination is developed and administered by The International Association of Administrative Professionals (IAAP). The Institute offers two separate certification programs: the CPS rating and the CAP rating. To attain the CPS rating, a candidate must meet certain educational and work experience requirements and pass a three-part, one-day examination. To attain the CAP rating, a candidate must meet certain educational and work experience requirements and pass a four-part, one and one-half day examination. **New CAP candidates** do not receive the CPS rating upon passing parts 1–3 of the CAP exam. **Current CPS holders** are required to take only Part 4 of the CAP exam. **New CAP candidates** must pass all four parts of the exam before being awarded any credit. Upon successful completion of all four parts of the exam, and with the authorization of a faculty advisor, successful candidates may be awarded credit in the following courses, provided that appropriate CPS/CAP documentation is submitted:

- **Certified Administrative Professional -for Previous CPS Holder, Part 4 only: Credits Allowed: 3**
- **New Certified Administrative Professional - All 4 Parts: Credits Allowed: 21**

Parts 1-3 (CPS/CAP)	ITE 115: Introduction to Computer Applications and Concepts	3 credits
	AST 102: Keyboarding II	3 credits
	AST 205: Business Communications	3 credits
	AST 243: Office Administration	3 credits
	BUS 205: Human Resources Management	3 credits
	BUS 200: Principles of Management	3 credits
Part 4: (CAP)	BUS 202: Applied Management Principles	3 credits
Total Credits for CPS/CAP (Parts 1, 2, 3) and CAP (Part 4)		21 credits

To learn more about the CPS/CAP exams, and to obtain an official transcript, contact:

International Association of Administrative Professionals (IAAP)

PO Box 20404

Kansas City, MO 64195

Phone: 816-891-6600

Fax: 816-891-9118

<http://www.iaap-hq.org/>

College Level Examination Program (CLEP)

CLEP is a national program of credit-by-examination that offers students the opportunity to obtain college credit for prior academic achievement. Virginia Western accepts most of the CLEP offered exams and uses the American Council on Education recommended minimum score of **50** for most tests when awarding CLEP credit. For higher level courses, the minimum score may be higher and will be noted. An **official CLEP transcript** is required for the award of credit.

To learn more about CLEP and order an official transcript:

<https://clep.collegeboard.org/test-takers/feedback>

CLEP Transcript Request Services

P.O. Box 6600

Princeton, NJ 08541-6600

Phone: 800-257-9558

Fax: 610-628-3726

Virginia Western Community College currently recognizes the following CLEP exams and equivalent course credit:

Subject Exam	VWCC Course	Credits Awarded
<i>Composition and Literature</i>		
American Literature	ENG 241-242	6
College Composition**	ENG 111-112	6
English Literature	ENG 243-244	6
Humanities	HUM 201-202	6
<i>Science and Mathematics</i>		
Biology	BIO 101-102	8
Calculus	MTH 271-272	6
Chemistry	CHM 111-112	8
College Algebra	MTH 163	3
College Mathematics	MTH 151	3
Pre-Calculus with Trigonometry	MTH 166	5
<i>Foreign Languages</i>		
French, Level 1	FRE 101-102	8
French, Level 2 - Minimum score of 60 required	FRE 101-102 FRE 201-202	14
German, Level 1	GER 101-102	8

College Level Examination Program (CLEP) cont'd

<i>Foreign Languages cont'd</i>		
German, Level 2 - Minimum score of 60 required	GER 101-102 GER 201-202	14
Spanish, Level 1	SPA 101-102	8
Spanish, Level 2 - Minimum score of 66 required	SPA 101-102 SPA 201-202	14

<i>History and Social Science</i>		
American Government	PLS 211	3
History of the US I, Colonization to 1877	HIS 121	3
History of the US II, 1865 to the Present	HIS 122	3
Human Growth and Development	PSY 235	3
Macroeconomics, Principles of	ECO 201	3
Microeconomics, Principles of	ECO 202	3
Psychology, Intro to	PSY 200	3
Sociology, Intro to	SOC 200	3
Western Civilization I, up to 1648	HIS 101	3
Western Civilization II, 1648 to Present	HIS 102	3

<i>Business</i>		
Business Law, Introduction to	BUS 241	3
Information Systems and Computer App.	ITE 115	3
Financial Accounting	ACC 211-212	8
Management, Principles of	BUS 200	3
Marketing, Principles of	MKT 100	3

Note: Credit for tests that are no longer offered may still be available, contact the Records office for more information at 857-7236.

****College Composition is the appropriate CLEP exam for AA, AS and AAS degrees. Virginia Western does not accept the College Composition – Modular or the older English Composition CLEP exam.**

To learn more about CLEP and to take a test locally, please contact:

**Roanoke Higher Education Center
108 N. Jefferson Street, Suite 216
Roanoke, VA 24016
540-767-6010**

Computer Aided Drafting (DRF 201)

For information on DRF 201 credit award, please contact David Webb (Program Head, Mechanical Engineering Technology/GIS) at (540) 857-7379.

Credit-by-Exam

In disciplines where no CLEP or AP exam is accepted by Virginia Western, locally developed department "challenge" exams may be a means of earning college credit for prior learning by demonstrating satisfactory academic competency in a particular subject.

In order to be eligible for credit-by-exam, the student must be admitted to the college in a program of study, and the request must be made with at least two weeks' prior notice of the requested exam date. Credit-by-Exam is not available for all courses taught at the college. Requests for department exams must be submitted to the appropriate academic office.

Each departmental exam may be taken only one time for a course, and the student must attain a grade of "C" or higher in order to receive credit for the examination. An exam may not be used to remove grades of "I", "F", "X", or "W", or to improve a grade already earned. In addition, a student may not challenge a lower level course in a subject which he/she has previously earned credit. Credits awarded by challenge examination may apply toward graduation requirements and will become part of the student's permanent record. However, the grade earned on the exam will not be calculated into the student's cumulative GPA. The grade earned on a department exam will be recorded on the student's official transcript.

Early Childhood Development Program Exemptions

Students enrolled in the Early Childhood Development curriculum at Virginia Western may earn advanced standing credit for:

CHD 167: Students who hold a current CDA (a nationally recognized credential) will receive advanced standing credit for CHD 167. This only applies to students who work with Head Start or Early Head Start (federally funded early childhood programs). This course is not required in the AAS or Career Studies Certificate at the college; it is only required to meet requirements for Head Start of Early Head Start.

CHD 265: Students will receive advanced standing credit for CHD 265 if they have completed CHD 120 or 121 and CHD 165 with a minimum "C" average, *and* one of the following:

- Worked in the Early Head Start or Head Start classroom for at least 3-5 years. EHS and HS staff may also be eligible for special consideration in CHD 165 course requirements**;
- Worked in the field for at least 10 years**;
- Hold a current CDA.

**Requires successful student observation from CHD faculty

Note: Students are never exempt from CHD 120 or 121, or CHD 165.

Firefighter Certificates (Inactive 5/16/14)

Students who successfully completed and have graduated from a certified firefighting training program may be granted credit for a variety of courses at Virginia Western. In order to be awarded the following credit, the student must submit the appropriate documentation to the Dean of the Liberal Arts and Social Sciences school:

Subject	Course	Credits
<i>Firefighter II Certificate—Credits Awarded: 3</i>		
Fire Suppression Operations	FST 105	3
<i>Hazardous Materials Certificate—Credits Awarded: 3</i>		
Hazardous Materials Response	FST 111	3
<i>Fire Officer I Certificate—Credits Awarded: 3</i>		
Fire Officer I	FST 140	3
<i>Fire Officer II Certificate—Credits Awarded: 3</i>		
Fire Administration	FST 240	3
<i>Fire Instructor I Certificate—Credits Awarded: 6</i>		
Principles of Public Speaking	CST 100	3
Fire Instructor I	FST 135	3

First Aid and CPR Certification

Students who successfully completed and have graduated from a certified first aid or CPR training program may be granted credit for a variety of courses at Virginia Western. In order to be awarded the following credit, the student must submit the appropriate documentation to the Dean of the School of Health Professions:

Subject	Course	Credits
<i>CPR + First Aid and Safety Certification—Credits Awarded: 3</i>		
First Aid and Cardiopulmonary Resuscitation	HLT 100	3
<i>CPR Certification—Credits Awarded: 1</i>		
Cardiopulmonary Resuscitation	HLT 105	1
<i>First Aid and Safety Certification—Credits Awarded: 2</i>		
First Aid and Safety	HLT 106	2
<i>Emergency Medical Technician Certificate—Credits Awarded: 6</i>		
Emergency Medical Technology I	EMS 112	3
Emergency Medical Technology II	EMS 113	3

International Baccalaureate (IB)

Students who have completed the Standard Level certificate with a score of 5 to 7 in the IB program may be granted advanced standing credit for a variety of courses. Students requesting IB credit must have an official transcript sent from the IB organization to the Virginia Western Records Office in order to be considered for credit. For detailed information, please contact the IB organization at:

<http://www.ibo.org/iba/transcripts/>

**7501 Wisconsin Avenue, Suite 200 West
Bethesda, MD 20814
Phone: 301-202-3000
Fax: 301-202-3003**

Subject Exam	Score of 5	Score of 6 or 7
Art Design	ART 131	ART 131-132
Biology	BIO 101	BIO 101-102
Business and Management	BUS 200	BUS 200 and 202
Chemistry	CHM 111	CHM 111-112
Computing Studies	CSC 201	CSC 201-202
Economics	ECO 202	ECO 201-202
English A1	ENG 111	ENG 111-112
English B	ENG 111	ENG 111
French A1 or B	FRE 101-102	FRE 201-202
Geography	GEO 210	GEO 200 and 210
German A1 or B	GER 101-102	GER 201-202
History	HIS 101	HIS 101-102
History of the Americas	HIS 121	HIS 121-122
History of Europe	HIS 225	HIS 225-226
Mathematics SL (Standard Level)	MTH 163	MTH 163 and 271
Mathematical Studies	MTH 151	MTH 151-152
Music	MUS 121	MUS 121-122
Philosophy	PHI 101	PHI 101-102
Physics	PHY 201	PHY 201-202
Psychology	PSY 200	PSY 200 and 230
Social Anthropology	SOC 211	SOC 211-212
Spanish A1 or B	SPA 101-102	SPA 201-202
Theater SL and HL	CST 130	CST 130
Visual Arts	ART 101	ART 101-102

Note: Credit for tests that are no longer offered may still be available, contact the Records office for more information at 857-7236.

Military Training

A student's military training, courses, and occupational specialty may all be considered for college credit. As a participating member of Servicemembers Opportunity Colleges (SOC), Virginia Western follows the American Council on Education's (ACE) Guide to the Evaluation of Educational Experiences in the Armed Services in determining the value of learning acquired in military service when applicable to the service member's program of study. Military service credit in the occupational/technical areas (i.e., Engineering, Health Technology) may require approval by the appropriate school dean prior to award.

In order to receive credit for military training, the student must submit a military transcript which includes the ACE recommended credit and initiate a request for evaluation to the VWCC Records. Note: If the student submits only the DD214 and no military transcript, only credit for HLT 110 will be awarded. Students who have completed basic training, regardless of the date of military experience, and have been honorably discharged may receive up to three credits for HLT 110.

The DSST program, formerly known as DANTEs, is currently offered by Prometric. Virginia Western may award course credit for acceptable DSST scores, as recommended by the ACE. DSST credit cannot be given for a course that is not offered by the college. A complete listing of current and prior tests and recommended scores may be found at: **www.GetCollegeCredit.com**.

Each branch of the service has its own transcript request service. Depending on the branch in which you served, a transcript can be requested from the following:

<i>Air Force</i>
<ul style="list-style-type: none">• Website: http://www.au.af.mil/au/ccaf/transcripts.asp• CCAF/DFRS, Simler Hall STE 128, 130 West Maxwell Blvd, Maxwell AFB AL 36112-
<i>Army, Coast Guard, Navy or Marine</i>
<ul style="list-style-type: none">• Joint Service Transcript (JST) website: https://jst.doded.mil/smart/signIn.do• For JST Technical Issues: NETPDTC , ATTN: JST Operations Center N615 , 6490 Saufley Field Road, Pensacola, FL 32509, Email: jst@doded.mil

Police Academy Certificates

Per the articulation agreement between the Virginia Community College System and the Virginia Department of Criminal Justice Services, students who have satisfactorily documented successful completion of the VA State Police Academy or a regional and independent certified training academy may be awarded the following credit. Appropriate documentation is required and must be submitted to the Administration of Justice program advisor or the Dean of the School of Liberal Arts and Social Sciences. Credit for the courses listed below is not transferable to four-year colleges or universities.

Subject	Course Title	Credits
<i>Entry Level Law Enforcement Training</i>		
ADJ 110	Introduction to Law Enforcement	3 credits
ADJ 115	Patrol Operations	3 credits
ADJ 229	Law Enforcement and the Community	3 credits
ADJ 236	Criminal Investigation	3 credits
HLT 110	Concepts of Personal and Community Health	2 credits
PED 137	Martial Arts	1 credit
<i>Entry Level Jailor / Court Services</i>		
ADJ 140	Introduction to Corrections	3 credits
ADJ 146	Adult Correctional Institutions	3 credits
<i>General Instructor Development</i>		
CST 100	Principles of Public Speaking	3 credits
<i>Leadership Development</i>		
ADJ 195	Leadership Topics in Administration of Justice	3 credits
ADJ 295	Police Administration	3 credits

Previous Completion Credit (Experiential Learning/ Work Experience Credit)

Virginia Western Community College recognizes that college-level learning occurs in settings other than the traditional classroom and, therefore, may grant credit to students who can demonstrate the academic merit of such experiences.

A student may be eligible for previous completion/experiential learning credit when the student's educational or occupational background or life experience closely parallels those experiences and objectives required by a college course. Credit is awarded only for documented learning that is equivalent to specific subjects at the college and is considered sufficient in content and length to warrant consideration for credit. It is the student's responsibility to provide proper documentation of experiences to be considered for credit. Documentation for special training or experience that is submitted with the request for credit will be retained in the student's file. The documentation must include samples of work or projects completed to assist the academic school in credit determination.

For consideration of experiential learning credit, the following apply:

- The student must be enrolled in a program of study at the college;
- The student should contact the appropriate academic school in which the course is taught (i.e. a request for credit for First Aid is submitted to the School of Health Professions) and complete the *Application for Advanced Standing—Previous Completion/Experiential Learning* form.
- A student may not fail or audit a course at the college and later receive credit for the same course through a previous completion/ experiential learning option;
- Credit earned through previous completion/experiential learning may not be used to meet the residency requirement for graduation;
- A maximum of 25 percent of credit toward graduation will be allowed for experiential learning;
- A grade of "T" will be assigned if previous completion/experiential learning credit is awarded. This grade will not be counted toward the student's cumulative GPA.

Virginia Western reserves the right to accept or reject credits earned from non-traditional, academic sources and to place a time limit on prior learning experiences for which advanced standing may be granted. With some exceptions, this credit is not guaranteed. Specific licenses, certifications, and specialized training that have been pre-assessed by the college (i.e., police academies, firefighter experience, CPS) are provided with the submittal of the certification alone.

The applicability of previous completion/experiential learning credit toward specific degree program requirements is subject to the advisor, school dean, and the registrar's approval.

If you are interested in receiving credit for previous completion/experiential learning, please submit the *Application for Advanced Standing—Previous Completion/Experiential Learning* form, along with the appropriate documentation, to your advisor or to the school dean that is responsible for the course. These forms are available in the college academic offices and the Records Office.

Transfer Credit from Post-Secondary Institutions

Official Transcripts Required: Students transferring from another post-secondary institution must submit a Virginia Western Application for Admission and should have all transcripts from previous institutions attended sent to the college Admissions Office. Students transferring from another Virginia community college do not need to submit an official transcript.

Curriculum Enrollment: A student must be enrolled in a program of study at the college in order to have a transcript evaluated and be awarded credit. The evaluation of transcripts is intended as a service to students who are pursuing academic programs at Virginia Western. It is not intended as a means for credentialing students or providing documentation for job promotions.

Request for Transcript Evaluation: Students must initiate a formal request to have transcripts from other institutions evaluated. A *Request for Transcript Evaluation* can be submitted in the college Admissions, Records, or Advising offices. Only official transcripts will be evaluated.

Regional Accreditation: Credit is transferable from colleges and universities that are accredited by SACS or another Commission on Colleges regional accrediting association, or by the Commission on Higher Education.

A student who is requesting transfer credit from an institution that is not recognized by a regional accrediting agency or association will need to make an appointment with the appropriate academic dean for Business, Technology and Trades; Liberal Arts and Social Sciences; Science, Technology, Engineering and Mathematic; and Health Professions depending on the curriculum in which they are enrolled. The student will need to provide the dean with the following information for each of the courses they wish to transfer: a) course description, b) course syllabus, and c) faculty credentials of the instructor who taught the course.

Course Credit: All acceptable courses will be transferred as closely to the Virginia Western course equivalent as possible. Transfer credit may be allowed for certain courses which do not directly correspond to a Virginia Western course. These courses are classified as Humanities, Social Science, Natural Science, or Business, and will be notated with an “EEE” on the student’s record.

Required Grades: Generally, no credit will be given for transfer courses with grades lower than a “C”, courses with grades of “P” or “S”, or for developmental courses. In determining transfer credit, course work applicable to the curriculum at VWCC may be accepted if the work completed at an institution is applicable to the student’s program at VWCC and the course content and level of instruction is at least equivalent to the content and level at VWCC.

Advanced Standing Awards on Transcripts: Virginia Western does not award transfer credit for tests (e.g., AP or CLEP) or credit evaluated by another institution or recorded on an external transcript. Students must submit official copies of transcripts or appropriate documentation in order for Virginia Western to evaluate and award credit according to college policy.

Evaluation of International Transcripts: Virginia Western will review an international transcript for possible credit if the transcript is printed in English or translated into English by a private evaluation agency.

For review of an international transcript, the student must make an appointment with the appropriate academic dean for Business, Technology and Trades; Liberal Arts and Social Sciences; Science, Technology, Engineering and Mathematic; and Health Professions depending on the curriculum in which they are enrolled. You will need to provide the dean with the following information for each of the courses you wish to transfer: a) course description, b) course syllabus, and c) faculty credentials of the instructor who taught the course.

A Request *for Transcript Evaluation* can be submitted to the college Admissions, Records, or Advising offices.

Please note that transcripts will not be evaluated during an appointment with the advisor. The evaluation request must precede your appointment.

Prospective students desiring to earn college credit through any of the afore-mentioned means should contact the Virginia Western Community college Admissions, Records, or Advising Offices.

Admissions Office: (540) 857-7231

Records Office: (540) 857-7236

Advising Office: (540) 857-7237

Virginia Western Community College provides its website, 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 registrations of virginiawestern.edu, the associated marketing site of <http://www.wheresyourthere.com>, and the associated social media sites of <http://www.facebook.com/viriniawestern>, <http://www.twitter.com/viriniawestern>, and <http://www.youtube.com/viriniawestern> 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 college advisor. 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. Supplements may be issued to this catalog when deemed necessary by the college.

Links or references to other materials and websites 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.

Virginia Western Records Office

PO Box 14007

Chapman Hall, Room 107

Roanoke, VA 24038-4007

540-857-7236 (office)

540-857-6102 (fax)

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-18 – GRADING POLICY

Policy Number: I-18

Last Reviewed: July 8, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

The quality of performance in any academic course is reported by a letter grade, the assignment of which is the responsibility of the instructor. These grades denote the character of study and are assigned quality points as follows:

- A Excellent: 4 grade points per credit
- B Good: 3 grade points per credit
- C Average: 2 grade points per credit
- D Poor: 1 grade point per credit
- F Failure: 0 grade points per credit

Other grades may be assigned to include **I** Incomplete; **P** Pass; **S** Satisfactory; **R** Re-enroll; **U** Unsatisfactory; **W** Withdrawal and **X** audit. These grades are not included in the calculation of grade point averages. Courses graded with an S, R, U, or X will not result in the award of credits.

Faculty have the prerogative to establish how each letter grade is determined in their courses. The grading requirements, including grading scale, must be documented in the course syllabus. Virginia Western does not have a college-wide grading scale, but leaves this to the discretion of the teaching faculty.

Once a grade is awarded, it is normally permanent. In situations where there are documented, mitigating circumstances or an uncontested error, grade changes must be requested within one year of receipt of the grade in question. For contested grades, students are allowed to submit a grade appeal only if they do so within one month after the grade is posted. Information regarding final grade appeals are found in the [Student Grievance Policy](#). Virginia Western's grade plan is reviewed annually under the supervision of the College Registrar and the Vice President of Academic and Student Affairs.

18.1 No Show Policy

In order to receive any letter grade, a student must have attended a minimum of one class meeting or the equivalent in the case of a distance learning course. In a distance learning course, initial student attendance is determined by course participation as measured by accessing and using course materials, completion of a class assignment, participation in a course discussion, or other evidence of participation.

Students who enroll in a course but do not attend a minimum of one class meeting or the distance learning equivalent by the census date will be administratively deleted from the course. In this case, there will be no tuition refund for the course. Students who are dropped from a course by the instructor for non-attendance cannot be reinstated unless instructor error is determined.

18.2 Withdrawal Policy

A grade of "W" is awarded to students who withdraw or are withdrawn from a course after the drop period, but prior to the completion of 60% of the session. Students who cease attendance prior to the withdrawal deadline may be withdrawn from the class. Students who are withdrawn by the instructor for non-participation cannot be reinstated unless instructor error is determined.

After the completion of 60% of the session, a student who withdraws or is withdrawn from a course will be assigned a grade of "F". Exceptions to this policy may be made under mitigating circumstances. Such circumstances must be documented and a copy of the documentation must be placed in the student's academic file. In order to be eligible for an administrative withdrawal, the student must have been making satisfactory progress in the course at the time of withdrawal.

Students seeking exceptions to this withdrawal policy must submit an *Administrative Withdrawal Form* and a copy of the documentation of the mitigating circumstance to the Admissions Office Manager.

18.3 Incomplete Grade Policy

The grade "I" is to be used only for verifiable, unavoidable reasons that a student is unable to complete a course within the normal course time. To be eligible to receive an "I", the student must (1) have satisfactorily completed more than 50% and (2) must request the faculty member assign the "I" grade and indicate why it is warranted. The faculty member has the discretion to decide whether the "I" grade will be awarded. Since the "incomplete" extends the enrollment in the course, requirements for satisfactory completion shall be established through consultation between the faculty member and the student.

In assigning the "I" grade, the faculty member must submit an *Incomplete Grade Contract* that (1) states the reason for assigning the grade; (2) specifies the work to be completed and indicates its percentage in relation to the total work of the course; (3) specifies the date by which work must be completed and (4) identifies the default grade (B, C, D, F, P, R, or U) based upon the coursework already completed. Completion dates may not be set beyond the subsequent semester (to include summer term).

If the work is not completed in accordance with the dates outlined in the *Incomplete Grade Contract*, the student will be awarded the default grade. The default grade will be final. At the end of each term, all outstanding "I" grades will be changed to the default grade prior to final grade processing.

18.4 Audit Policy

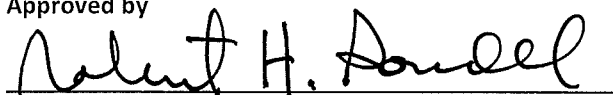
Students desiring to attend a course without taking the examination or receiving credit for the course may do so by registering to audit through the usual registration process and paying the normal tuition. Permission of the academic dean or the College Registrar on the *Audit Approval Form* is required to audit a course.

Audited courses carry no credit and do not count as a part of the student's course load. Students desiring to change status in a course from audit to credit or from credit to audit must do so within the add/drop period for the course.

Students who desire to earn credit for a previously audited course must re-enroll in the course for credit and pay normal tuition to earn a grade other than an "X". Advanced standing credit cannot be awarded for previously audited courses.

Review/Revised: 12/2012; 1/2014; 7/2014

Approved by



Robert H. Sandel, Ed.D.

President

8/19/14

Date

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-33 – PRIVACY OF EDUCATIONAL RECORDS

Policy Number: I-33

Last Reviewed: March 18, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

Privacy of Education Records

The Family Educational Rights and Privacy Act (FERPA), also known as the Buckley amendment, is a federal law that was enacted in 1974 to protect the privacy of students and their educational records. The intent of the legislation is to protect the rights of students and to ensure the privacy and accuracy of educational information. The Act provides for the right of eligible students to:

- Inspect and review their educational records. Additional information can be found in the policy regarding *Student Permanent Records*.
- Request an amendment to records that are believed to be inaccurate. Additional information can be found in the policy regarding *Student Permanent Records*.
- Require Virginia Western to obtain written consent prior to disclosure of personally identifiable information, except those items noted herein
- File a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with FERPA.

“Educational information” is defined as any record maintained by an educational institution, including files, documents, and materials of any type which contain information directly related to students, and which allows a student to be identified. “Educational information” does not include:

- “Sole possession” records or private notes held by educational personnel which are not accessible or released to other personnel;
- Law enforcement or campus security records which are solely for the purposes of law enforcement;
- Records related to individuals who are employed by Virginia Western;
- Records related to treatment provided by a physician, psychiatrist, psychologist, or other recognized professional;
- Records of the institution which only contain information about an individual obtained after that person is no longer a student at Virginia Western (i.e., alumni records).

Students who have applied, but not attended Virginia Western, and deceased students are not protected under FERPA guidelines.

Upon request, Virginia Western discloses education records without the student’s consent to officials of another school in which a student seeks or intends to enroll, or where the student is already enrolled, so long as the disclosure is for purposes related to the student’s enrollment or transfer. Virginia Western will disclose the educational records of dual enrollment students to high school personnel.

Student education information may also be used without a student’s written approval for the purposes of educational research conducted or approved by Virginia Western.

Students can authorize the release of their education information to a parent, spouse, or other third party by completing an [Information Release Form](#).

33.1 Parents' Rights Under FERPA

Parents lose rights under FERPA when their child turns 18 years of age or starts attending classes in any postsecondary institution, whichever happens first. Under 20 USC 1232g(d), all rights of parents, including the right to inspect educational records and to consent to the disclosure of personally identifiable information transfers to the student at the earlier of: 1) the attainment of age 18, or 2) attendance at an institution of postsecondary education.

Parents of a financially dependent student, as defined by the Internal Revenue Service (IRS), may obtain their child's records after submitting proof of the student's dependency via the most recent federal tax form. Requested information will not be released prior to the submission of this documentation.

Students can authorize the release of their education information to a parent, spouse, or other third party by completing an [Information Release Form](#).

33.2 Spouses' Rights Under FERPA

Under FERPA, a student's spouse is considered an "unrelated third party" and, therefore, has no rights under the Act. Virginia Western cannot disclose a student's educational information to a spouse without consent, even if the spouse is supporting the student.

Students can authorize the release of their education information to a parent, spouse, or other third party by completing an [Information Release Form](#).

33.3 Release of Directory Information

As provided by FERPA, colleges may disclose the following Virginia Community College System directory information items without the student's prior consent at the College's discretion:

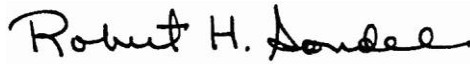
- Student's Name
- Participation in officially recognized activities and sports
- Address
- Telephone Listing
- Weight and height of members of athletic teams
- E-mail Address
- Degree, honors, and awards received
- Major field of study
- Dates of attendance
- Grade level
- The most recent educational agency or institution attended
- Number of credit hours enrolled
- Photos

As noted above, the College reserves the right to publish the names of students who receive academic honors.

A student may formally request that Virginia Western not release directory information on their behalf by submitting a *Student Request for Non-Disclosure of Records* to the Records Office or by changing the privacy settings in the Student Center of their My VWCC account. Once this request has been made, every reasonable effort will be made to safeguard the confidentiality of directory information.

Once an official request of non-disclosure has been made, the student will not be permitted to request an official or unofficial transcript online in the College's student information system. The student will be required to submit written authorization with proof of identity to the Records Office before a transcript will be released. Additionally, Virginia Western staff will not respond to phone calls from potential employers to verify enrollment for students who have submitted an official request of non-disclosure without the student's written authorization.

Approved by



Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Review/Revised: 12/2013; 3/2014

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-34 – Student Permanent Record

Policy Number: I-34

Last Reviewed: February 3, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

Student Permanent Record

The Records Office maintains records for each student attending, or who has attended, the College. A record of the student's grades and courses taken will be permanently maintained in electronic format. This permanent, electronic record meets the guidelines set up by the American Association of Collegiate Registrars and Admissions Officers and includes:

- The credits transferred from other institutions, including the number of credit hours given (the number of hours may change if the student transfers from one curriculum to another)
- The semester in which the student is currently enrolled
- The student's social security number or ID number
- The Academic Program and Plan
- The course number, course title, the hours attempted, the hours completed, and the grade for each course. Course section shall be optional;
- A grade point average for each semester attended;
- The cumulative grade point average of the student; and
- Academic action taken against the student including academic probation, suspension, and dismissal.
- Degrees, diplomas, certificates, honors

Disciplinary probation and disciplinary dismissal will not be placed on the students' permanent records. Disciplinary records are stored separately and are available for release with permission from the student.

A file will be maintained during the student's enrollment at the College, but will be destroyed after three years of non-attendance. This file may include:

- High school transcripts;
- Other college transcripts and evaluations;
- Correspondence with the student;
- Grade Change Forms;
- Course Substitution and Advanced Standing Forms.

Virginia Western administrators, faculty, and staff who need to see student records to assist in the student's academic pursuits may have access to the aforementioned records. College personnel

involved in institutional research may also be permitted to access records on a need-to-know basis. All others are required to have written permission from the student.

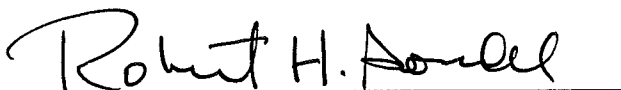
Eligible students have the right to inspect and review their educational records within 45 days of submitting a written request to the Records Office. This request must identify the record(s) the student wishes to inspect. Once the written request has been submitted and reviewed, the Records Office will make arrangements for access and notify the student of the time and place where the records may be inspected. Virginia Western is not required to supply copies of records unless there are specific, mitigating circumstances (i.e., great distance from the college) that prevent the student from reviewing the records.

34.1 Amending the Student Record

A student may ask the college to amend a record believed to be inaccurate or misleading. If Virginia Western decides not to amend the record, the eligible student has access to the formal grievance procedures outlined in the Student Handbook. If, after the grievance, Virginia Western still chooses not to amend the record, eligible students have the right to place a statement with the record commenting on the contested information.

Review/Revised: 2/2014

Approved by



Robert H. Sandel, Ed.D.
President

2/17/14
Date

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I – 13 PROTECTION OF STUDENT RECORDS

Policy Number: I-13

Last Reviewed: October 6, 2014

Responsible Dept.: DEAN OF STUDENT SERVICES/REGISTRAR

Virginia Western Community College (VWCC) protects the security, confidentiality and integrity of student records and maintains security measures to protect and back-up data. VWCC ensures the confidentiality, accuracy and protection of student educational records by following the requirements of Family Education Rights and Privacy Act of 1974 and the Virginia Community College System Policy (Section 6.2.7 <http://cdn.vccs.edu/wp-content/uploads/2013/07/Sec61.pdf>). In addition, VWCC adheres to the Commonwealth of Virginia Information Technology Standard ISO27000 (ISO 27000) which ensures the security and confidentiality of all information.

VWCC has access to electronic student records and stores physical student information records. Electronic records are maintained within the Virginia Community College System's (VCCS) centrally housed PeopleSoft Student Information System (SIS). The information is protected in accordance with the requirements outlined in ISO27000. The VCCS maintains a "mirrored snap shot" of all SIS data at the Greenfield Center in Botetourt County. All student records are encrypted and sent daily to the Greenfield Center VCCS disaster site.

Physical student records are maintained in fire proof cabinets in a secured/gated room inside the Records Office located in Chapman Hall, which is also locked when the Records Office is not open for business. During hours of operation, the Records Office is always staffed to insure records security. The student records contain such items as: application for admission, grade change forms, experiential credit forms, transcripts, transcript requests, plan changes, change of personal information, advanced standing credit, administrative withdrawals, etc. In accordance with the Commonwealth of Virginia Records Retention and Disposition Schedule in the Virginia Public Records Management Manual, hard copy data is maintained for three years after the student's last date of attendance; electronic data is not purged. Disposal of student records is handled through CINTA security services.

All college new hires are notified that FERPA training is required during their new hire orientation. An e-mail is sent to the college community every semester by the Registrar outlining FERPA requirements and how to identify blocks on release of information. Directory information may be released upon request at the discretion of the college. See information regarding FERPA on the college website at: <http://www.virginiawestern.edu/services/records/righttoprivacy.php>. Directory information includes: student name, address, e-mail address, telephone number, dates of

attendance, number of credit hours enrolled, grade level, major field of study, degrees received, awards and honors, photos, most recent educational institution, participation in clubs and activities, and weight/height of members of athletic teams. Although these items have been deemed directory information, faculty and staff will avoid releasing a student's address or telephone number without written authorization.

Administrators, academic advisors, faculty and classified staff who need to see student records to assist in the student's academic pursuits may have access to the records after the completion of a Security Access Request Form which requires the approval of the employee's supervisor and the VWCC student records data owner. If job responsibilities change or employment is terminated, either a change in access is completed or all access is deleted. All access is reviewed annually in compliance with ISO27000 to ensure access is required and necessary for each employee.

If a security breach occurred, VWCC would follow the VWCC Threat Management Information Security Incident Handling guideline which is part of ISO27000. The nature and severity of the information security incident would be assessed and the Incident Response Team would be informed of the potential breach of student information. An Incident Reporting Form would be completed and all procedures within the Threat Management guideline would be followed.

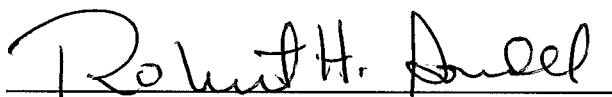
To reiterate the need to maintain the integrity, confidentiality and security of student records, the college website, Student Handbook and Faculty Handbook address these issues and faculty and staff are expected to adhere to these standards and guidelines. Links to the various locations of this information in these publications are provided below.

<http://www.viriniawestern.edu/services/records/righttoprivacy.php>

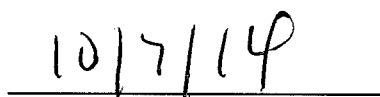
<http://www.viriniawestern.edu/iet/standards.php>

Updated: 5/2013; 6/2014; 10/2014

Approved by



Robert H. Sandel, Ed.D.
President



Date

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-14 – POLICY ON PROVIDING CREDIT FOR NONCREDIT COURSES

Policy Number: I-14

Last Reviewed: December 4, 2012

Responsible Dept.: DEAN OF STUDENT SERVICES/REGISTRAR

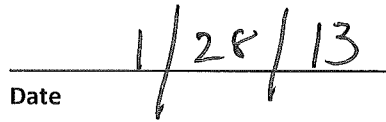
Virginia Western Community College does not award credit for courses taken as noncredit. If a noncredit course leads to credentialing then the credential could be used to provide credit through experiential learning as outlined in policy I-15 (Policy on Awarding Credit).

Updated November, 2012

Approved by



Robert H. Sandel, Ed.D.
President


Date

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

1-15 –POLICY FOR AWARDING CREDIT

Policy Number: 1-15

Last Reviewed: December 17, 2012

Responsible Dept.: DEAN OF STUDENT SERVICES/REGISTRAR

Virginia Western accepts credit for transfer, experiential learning, credit by examination, advanced placement, military training and professional certificates that is consistent with our mission.

- Transfer credit is defined as credits transferring from another post-secondary institution. Students must submit original transcripts from the post-secondary institution to receive credit.
- Experiential learning credit is college-level learning that occurs in settings other than the traditional classroom and is granted to students who can demonstrate the academic merit of such experiences. Students possessing a certificate in defined areas may be granted credit by providing documented successful completion of certificate.
- Credit by examination may be provided in disciplines where no College Level Examination Program (CLEP) or Advanced Placement (AP) exam is accepted by Virginia Western. Locally developed department “challenge” exams may be a means of earning college credit for prior learning by demonstrating satisfactory academic competency in a particular subject.
- Virginia Western offers a selection of national standardized exams, Advanced Placement (AP), College Level Examination Program (CLEP) and International Baccalaureate (IB), which offer students the opportunity to obtain college credit for prior learning. Minimum scores are outlined in the *College Credit through Advanced Standing* brochure. College credit may be awarded for those exams for which Virginia Western Community College has determined specific equivalents.
- Military training, courses and occupational specialty can be considered for college credit. Virginia Western follows the American Council on Education’s (ACE) Guide to the Evaluation of Educational Experiences in the Armed Services in determining the value of learning acquired in military service.

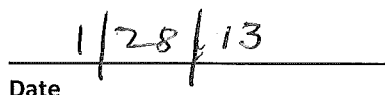
Procedures for awarding above defined credit are outlined in *College Credit through Advanced Standing* brochure. The procedures are reviewed annually and are available in hard copy and on the college website.

Updated November, 2012

Approved by



Robert H. Sandel, Ed.D.
President



Date

TUITION RATES & FEES

Tuition rates and fees are published each semester and are subject to change.

CURRENT RATES

Virginia Resident	\$149.09 per credit hour*
Non-Virginia Resident	\$343.69 per credit hour*
Non-Virginia Resident E-Rate	\$237.00 per credit hour*

[Click here for tuition table](#)

**Composite tuition is subject to change.*

To be eligible for in-state tuition rates you must meet criteria set by the Commonwealth of Virginia. One year of residency immediate to enrollment must be supported by documentation. You can receive information regarding general criteria for determining Virginia d from the college Admissions Office.

TUITION PAYMENT

Registration is not complete until your tuition is paid by the [payment deadlines](#). If tuition is not received by the deadline, your class be dropped and you will need to re-register.

There are several options for tuition payment. See the [Payment Options](#) page for complete instructions.

The [Financial Aid Office](#) can help you find information on grants, scholarships, and loans.

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-17 – TUITION REFUNDS

Policy Number: I-17

Last Reviewed: March 18, 2014

Responsible Dept.: DEAN OF STUDENT SERVICES/ADMISSIONS OFFICE MANAGER

Tuition Refunds

Students qualify for a tuition refund for those credit hours officially dropped during the drop period. This refund will be at the full credit rate. After the drop period has passed, no tuition refund will be issued. Exceptions to this policy may be made in extreme, mitigating circumstances which are appropriately documented in accordance with [Virginia Community College System \(VCCS\) Policy 4.3.2.](#)

Qualifying tuition refund exceptions may include:

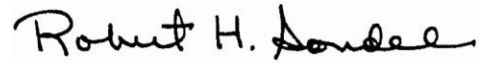
- Major medical emergency
- Extreme financial hardship involving sudden, unforeseen loss
- Death of an immediate family member; immediate family is defined as a father, mother, stepfather, stepmother, spouse, sibling, step-sibling, child, or stepchild
- Errors by Virginia Western personnel; documentation for these errors must be submitted by the department in which the error occurred
- National emergency or mobilization declared by the President of the United States in accordance with Section 23-9.6:2 of the Code of Virginia
- Military service as defined in VCCS Policy 4.3.2.3, pursuant to 23-9.6:2 of the Code of Virginia, and in conjunction with the State Council of Higher Education of Virginia (SCHEV) Guidelines.
- For certain federal financial aid recipients as defined in VCCS Policy 4.3.2.5

Qualifying tuition refund exceptions do not include:

- Misunderstanding of college policies and accompanying procedures as published in the College Catalog, the Student Handbook, or the college website
- Misunderstanding of course requirements or prerequisites
- Dissatisfaction with course content, instruction, or academic progress
- Conflicts with child care, work, or vacation schedules
- Changes in eligibility for financial aid or scholarships
- Personal errors in judgment
- Lack of transportation
- Incarceration

Students requesting a tuition refund policy exception must submit a *Tuition Refund Request Form* to the Admissions Office. This form must be accompanied by appropriate supporting documentation of the extreme, mitigating circumstance that qualifies for an exception to the refund policy.

Approved by

Handwritten signature of Robert H. Sandel in black ink.

Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Review/Revised: 3/2014

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-30 – STUDENT DOMICILE/ELIGIBILITY FOR IN-STATE TUITION POLICY

Policy Number: I-30

Last Reviewed: September 16, 2014

Responsible Dept.: COORDINATOR OF ENROLLMENT SERVICES

Student Domicile/Eligibility for In-State Tuition

The Virginia Community College System is guided by the Code of Virginia and the regulations of the State Council for Higher Education on determining domicile.

For the purposes of in-state tuition, a Virginia resident is defined by state law as one who has lived in Virginia, with intent to remain a Virginian, for a period of at least one year prior to the first official day of class for the semester in which he or she is enrolling. The burden of proving eligibility for in-state tuition rests with the applicant. All applicants to Virginia Western who claim entitlement to Virginia in-state tuition rates must complete the domiciliary items included with the application for admission as well as whatever additional documentation may be deemed necessary.

Initial determination of eligibility for in-state tuition rates is made by a member of the Admissions Office staff. Applicants may appeal this initial determination to the Coordinator of Enrollment Services in writing within 30 days of the decision. This appeal must include copies of the applicant's driver's license, motor vehicle registration, income tax returns for the previous tax year, and any other relevant documents that may support the claim of eligibility for in-state tuition rates. This intermediate review will be completed within 30 days of the receipt of the written appeal and supporting documentation.

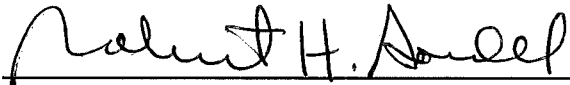
Applicants may appeal the intermediate review by the Coordinator of Enrollment Services. This appeal must be submitted in writing to the Domicile Appeals Committee within 30 days of receiving the results of the intermediate review. The decision of the Domicile Appeals Committee represents the final administrative review.

Students classified as out-of-state who can provide clear and convincing evidence through this appeals process that they were eligible for Virginia domicile on the first day of classes for a semester may have their status changed for the current term.

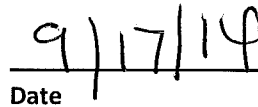
In the event that a student's circumstances change after a semester has begun, the student's tuition status may be eligible for reclassification; this reclassification shall be effective for the next academic semester following the submission date of a new Application for In-State Tuition. It is the responsibility of the student to submit a new Application for In-State Tuition to the Virginia Western Admissions Office. Virginia Western will not initiate this process on behalf of the student.

Reviewed/Revised: 1/2014; 9/2014

Approved by



Robert H. Sandel, Ed.D.
President



Date

Help/FAQ: Return Policy

Return Policy

General Return Policy

STANDARD RETURN POLICY:

A valid receipt and/or packing slip are required for all refunds or exchanges. All items (except Course Materials and Hardware/Software) unopened and in original condition returned within 30 days of purchase may be exchanged or refunded to the original form of tender.

Course Materials and Hardware/Software Details:

Course Materials (textbooks):

- A full refund will be given for textbooks (excluding Final Sale items) returned prior to your campus specific refund deadline. Materials purchased after the campus specific deadline (but before the final week of class) must be returned within 2 business days of purchase. Materials purchased during the last week of classes or final exams are not returnable/refundable.
- Final Sale items include the following: Inkling Digital Textbooks, Study Guides, Test Prep Books, Bar Charts, Cliff Notes, Professional Reference Study Aids, clearance items and magazines. All these items are not returnable/refundable.

Hardware & Software:

- Unopened (unless defective) computer hardware and software may be refunded or exchanged within 14 days of purchase.

TWO EASY WAYS TO RETURN:

1. Return to the bookstore you made your purchase from.
2. Return by mail. Click "Store Information" in the header or footer to view your store address.
Note: we do not refund shipping and handling fees.

Here are the steps to return your item(s) for a refund.

1. Package your items securely so there is no damage or lost items while in transit.
2. A copy of your shipping confirmation email or order details should be sent with your return. If you do not have your shipping confirmation or order details, then simply include a note with your name, address, and order number. Refunds may be delayed if the return cannot be identified.
3. Return shipping is at your expense unless Follett has committed an error with the order. It is suggested to use a traceable, insured method of shipping when returning your item(s) as we are not liable for lost or damaged packages. Retain your tracking information and shipping receipt until your refund is issued. Ground or an equivalent level of shipping is sufficient.

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VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-1 – REFUNDS, CREDITS, AND REINSTATEMENT AS A RESULT OF MILITARY SERVICE

Policy Number: I - 1

Last Reviewed: April 8, 2014

Responsible Dept.: RECORDS OFFICE

In accordance with the Code of Virginia, Section 23-9.6:2 and the corresponding SCHEV Virginia Tuition Relief, Refund, and Reinstatement Guidelines, Virginia Western Community College provides for the tuition relief, refund and reinstatement of students whose service in the uniformed services has required their sudden withdrawal or prolonged absence from their enrollment due to a call or order to active duty, of more than 30 days, after the beginning of a semester. Dependents of military members may also be given consideration under this policy.

For the purposes of this policy, the following definitions shall apply:

“Service in the uniformed services” means service (whether voluntary or involuntary) on active duty in the Armed Forces, including such service by a member of the National Guard or Reserve, for a period of more than 30 days under call or order to active duty of more than 30 days.

“Dependents” is defined as any civilian qualifying as a military dependent under 37 USC 401 currently or as otherwise amended.

“Tuition” means the actual price of education charged to a student for the term in which service in the uniformed services caused his or her sudden withdrawal or prolonged absence from enrollment at a Virginia institution of higher education.

“Reinstatement” means the re-admittance and reenrollment of a student whose service in the uniformed services has caused his or her sudden withdrawal or prolonged absence from enrollment.

“Sudden withdrawal” means leaving an institution after a semester has begun or after the tuition and required fees for a term have already been billed to or paid by the student.

Documentation

To be eligible for the considerations detailed in this policy, the College requires students to complete the following:

- The student must complete a Student Registration Change Form. Student Registration Change Forms are available through the Admission Office located in Chapman Hall, Room 108 (540-857-7231).
- If the student elects to receive an “I” Incomplete grade for a course(s), the instructor should forward an Incomplete Grade Contract to the Registrar’s Office.
- The student must provide a copy of the applicable military orders or enlistment contract.
- For verification purposes, the student must present a valid, active duty military identification card.
- Complete an exit interview with the Financial Aid Office.

- Return the completed Student Registration Change Form and the above-mentioned documents to the Registrar's Office for processing.

Tuition and Required Fees

If the student is deployed to active duty military service during the semester and the student requests to be dropped from their classes after the last date to drop and receive a refund of tuition, the student can:

- Drop all classes and all tuition charges will be waived with:
 - Personal payments refunded (*when a student's account balance does not show a balance due, following the drop*)
 - Financial aid adjusted as required
 - Financial aid refunds repaid by student if appropriate
 - Maintain all or part of enrollment with:
 - Tuition adjusted accordingly
 - Financial aid adjusted as required
 - Financial aid refunds repaid by student if appropriate
- Withdraw from all or part of their courses with no refund and be assigned a grade of "W."

If the event that there is an unpaid student account balance at time of deployment, the college will work with student on payment arrangements. No collection actions will occur during deployment; however, the student must resolve any unpaid balances prior to subsequent enrollment.

Academic Credit

When a student is deployed to active duty military service (for reservists) or mobilized (active military) as described in the Code of Virginia, Section 23-9.6:2 and the corresponding SCHEV Virginia Tuition Relief, Refund, and Reinstatement Guidelines, the student will have the following options concerning grades assigned for the semester in which the call to active duty occurs.

- If the student leaves at any time during the semester and elects to receive a full tuition refund, no courses or grades will be recorded on the student's transcript.
- If the student elects to receive an "I" (Incomplete) grade, the regulation regarding conversion of an "I" to "F" grade will be suspended until the student returns to Virginia Western. Should the student not return to Virginia Western, the "I" will revert to a "W" (Withdrawal).
- The student may be given the option of taking their examinations prior to regularly scheduled times as an exception to VCCS policy 5.6.1.
- If the student leaves at a point in the semester after which a significant amount of work has been completed, the student may request the assignment of a grade for work completed. This option requires a joint agreement of the student and the faculty member(s).

Textbooks

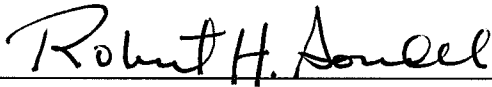
Upon sudden withdrawal or prolonged absence, students in uniformed service at Virginia Western Community College requesting a refund for textbooks will be refunded the cost of textbooks purchased from the college's local textbook vendor (Follett Higher Education Group), according to the contractual agreement between the college and the bookstore.

Reinstatement

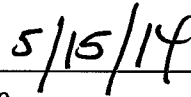
The following provisions govern reinstatement to the College upon release or return from service in the uniformed services.

- The student will be assured a reasonable opportunity to be reinstated to their program of study (if available), without having to reapply for admission if they return to the College after a cumulative absence of not more than five years, and they provide notice of intent to return to the College not later than three years after the completion of the period of service.
- Relevant exceptions to these timelines can be found in the Higher Education Opportunity Act.
- Throughout the entire process, the student will have access to advising services to determine the impact of absence from the program, to evaluate the ability to resume study, and to assess options.

Approved by



Robert H. Sandel, Ed.D.
President



Date

Review/Revised: 9/20/12; 10/15/12; 4/2014

FINANCIAL AID

The Office of Financial Aid & Veterans Affairs' primary function is to assist students with obtaining financial resources to support their educational goals, while remaining compliant with the Federal, State and institutional rules in which we operate. Our customer service philosophy is based on respect and dignity of individuals; protecting their privacy; and ensuring confidentiality of their student records, financial statements and personal challenges. We consistently apply all federal, state and institutional policies without discriminating on the basis of race, gender, ethnicity, sexual orientation, religion, disability, age, or economic status.

We are advocates of education and encourage students to be faithful to their desire for growth by encouraging critical thinking and responsible financial decisions. The Office of Financial Aid and Veterans Affairs promotes professional and personal development of its employees. We are lifelong learners who respect diverse viewpoints and promote the freedom to express ideas and opinions - seeking solutions to every challenge. We strive to provide the best service that supports the goals of Virginia Western Community College.

[Click here to access the Free Application for Federal Student Aid \(FAFSA\) \(http://www.fafsa.ed.gov/\)](http://www.fafsa.ed.gov/) . Additional information including a FAFSA Tutorial, can be found on our [How to Apply](#) page.

Federal School Code: 003760

REGULAR OFFICE HOURS

Monday - Thursday: 8:00 AM - 5:30 PM

Friday: 8:00 AM - 4:00 PM

2014 HOLIDAY OFFICE HOURS

November 26: Close at noon

November 27 - 28: Closed for Thanksgiving Holiday

December 22 - January 2: Closed for Winter Break

SPRING 2015 REGISTRATION HOURS

January 5 - 16, 2015:

Monday - Thursday: 8:00 AM - 6:00 PM

Friday: 8:00 AM - 5:00 PM

CONTACT US

The Financial Aid Office is located in Chapman Hall Rm 106 and can be reached by phone at 540-857-7331 or by email at finaid@virginiawestern.edu.

Fax: 540-857-6208

Mailing Address:

P.O. Box 14007

Roanoke, VA 24038

HOW TO APPLY

1. APPLY FOR ADMISSION

Apply for admission to Virginia Western Community College as a degree/certificate candidate.

2. COMPLETE THE FAFSA

Complete a Free Application for Federal Student Aid (FAFSA) immediately, even before you are informed of your admissions offer. The application should be completed each year. You can:

- Apply online at <http://www.fafsa.ed.gov> (<http://www.fafsa.ed.gov>). (highly recommended)
- Go to www.fafsa.ed.gov/options.htm (<http://www.fafsa.ed.gov/options.htm>) and download a PDF version of the FAFSA to complete and mail or fax for processing.
- Call 1-800-4-FED-AID (1-800-433-3243) and request a paper application.

No additional Virginia Western financial aid form is needed for the fall and spring semesters. A [supplemental form](#) is required for the summer semester.

3. CHECK YOUR STUDENT AID REPORT

Check the accuracy on the Student Aid Report sent to you by the federal government processor in response to your application. If you provided an email address when you submitted your FAFSA, you will receive your Student Aid Report electronically. If you need to make corrections, you may do so using your Student Aid Report or online at <http://www.fafsa.ed.gov> (<http://www.fafsa.ed.gov>).

4. RESPOND TO FINANCIAL AID OR ADMISSIONS INQUIRIES

Respond promptly to any financial aid or admissions inquiries you may receive from VWCC. Be sure to complete and return all financial aid materials that are requested, such as verification documents and permanent residency documents. **Financial Aid will not accept any additional materials via the student's VWCC email account.**

5. REPORT SCHOLARSHIPS AND FINANCIAL AID RECEIVED

Report all scholarships and financial aid received to the Financial Aid Office. Receipt of additional scholarships and awards may result in a recalculation of your financial aid eligibility, which may result in a reduction of previously-awarded financial aid.

6. REGISTER FOR CLASSES

Register for classes.

Financial aid is intended to pay for classes that are required for your program. When registering for classes make sure to review the requirements for classes in your specific program.

7. PAY YOUR BALANCE

Pay your balance each semester at the time of registration. Awarded aid should be subtracted from the balance due and any difference needs to be paid immediately in order to avoid being dropped from classes.

WHO CAN APPLY

Most students are eligible for some type of financial aid, regardless of family financial circumstances.

To be eligible for aid, you must

- **Complete a Free Application for Federal Student Aid (<http://www.fafsa.ed.gov/>)** or a Renewal Application electronically. don't have internet access, contact the Federal Student Aid Information Center at 1-800-433-3243.
- Be a United States citizen or have permanent residency status.
- Have a high school diploma, GED certificate, or homeschooling equivalent as defined by state law.
- Be enrolled in an eligible degree or certificate program.
- Be making "**satisfactory academic progress**".
- Not have an outstanding obligation on financial aid previously received at any educational institution, or be in default on a federal student loan.
- Be registered with Selective Service, if a male and at least 18 years old.
- Be in compliance with certain stipulations pertaining to the possession and sale of illegal drugs.

[Click here for more information on determining your eligibility.](#)

TYPES OF AID

College can be expensive. Financial aid is monetary help offered to individuals through government agencies or other sources. There are several types of aid available to students, when they do not have sufficient financial resources to pay for their education. Generally, students must demonstrate they have financial need by filling out the [Free Application for Student Aid \(FAFSA\) \(http://www.fafsa.gov\)](http://www.fafsa.gov). Your school will send you an award notification via your VWCC email detailing the types of aid for which you qualify. It is important to understand the types of awards you are granted and the eligibility criteria you must meet as well as the repayment stipulations, if any.

Please use the menu at right to explore the different types of aid available.

VETERANS BENEFITS

VWCC's Financial Aid/Veterans Affairs Office coordinates all veterans' educational benefits from the U.S. Department of Veterans Affairs at the College.

The office is located on the Virginia Western campus in Chapman Hall, Room C106. The VA certifying official can be reached by phone at 540-857-7395.

The VA requires all students to be enrolled in an official curriculum leading to a certificate or degree in order to receive benefits. You must contact your VA certifying official each semester to complete the necessary forms to establish and maintain your eligibility for benefits.

The Department of Veterans Services State Approving Agency approves programs of education offered at Virginia Western Community College.

MILITARY STUDENT CENTER NOW OPEN!

The Military Student Center (MSC) is now open in Anderson 122. Current hours are Monday-Thursday 8:30-5:30 and Friday 8:30-5:30. Or we can be reached by phone at 540-857-6278. We have 2 computers available for use, as well as a small, but comfortable lounge.

Services are still available in Chapman Hall, but the MSC is designed to be a one-stop center for nearly, if not all, services you may need as a military (veterans, active, dependent, reserve, etc.) college student.

Stop by. Make yourself at home. Get to know some of the other military students on campus.

RESPONSIBILITIES OF VETERAN STUDENTS

- Register only for courses that are required for completion of your selected degree/certificate program.
 - Submit the [Certification Request for VA Educational Benefits](#) form (commonly known as the blue form) to your VA certifying official each term you enroll. You can also complete the form via [Word document](#).
 - Notify your VA certifying official of any changes in your schedule, degree program and /or address.
 - Make satisfactory academic progress toward your chosen degree program.
-

TERMS, POLICIES & CONDITIONS

Refer to the sections below for information on various terms, policies, and conditions.

- [Awarding Aid](#)
 - [Rights & Responsibilities](#)
 - [Satisfactory Academic Progress](#)
 - [Appeal for Reinstatement of Aid](#)
 - [Drops/Withdrawals and Your Eligibility](#)
 - [Financial Aid Appeals](#)
 - [VGAP Renewal Requirements](#)
 - [Refunds of Unearned Title IV Funds](#)
 - [Charging Textbooks](#)
 - [Consortium Agreements](#)
 - [Title IV Code of Conduct](#)
 - [FERPA](#)
 - [Student Handbook](#)
 - [College Catalog](#)
-

AWARDING AID

The Financial Aid Office authorizes the student's financial aid to be directly credited (disbursed) to his or her college account. The Business Office determines college charges and then coordinates disbursement with the state's Office of Treasury Services.

The disbursement process begins after the end of the full refund period. Any remaining funds, after college charges are subtracted out, are mailed to the student. Students typically receive these remaining funds approximately 6 - 8 weeks into the semester.

ALTERNATIVE (PRIVATE) LOAN CHECKS

Alternative loan program disbursements are typically received in the form of a check made co-payable to the student and the institution. The student must endorse this co-payable loan check(s) at the Business Office before the loan can be disbursed to you.

PAYING THE BALANCE DUE ON YOUR STUDENT ACCOUNT

When financial aid awards are not enough to satisfy the balance due, the remaining amount must be paid from personal funds at the time of registration. Federal Work-Study amounts may **not** be deducted from the balance due since this money must be earned in a work-study position and will be disbursed in the form of a paycheck on a bi-weekly basis once the semester begins.

RIGHTS & RESPONSIBILITIES

Students receiving federal and state financial aid must be aware of the following rights and responsibilities.

YOU HAVE THE RIGHT TO KNOW

- The financial aid programs that are available, and the eligibility requirements that pertain to each of these.
- The deadlines for submitting application forms.
- How financial aid awards are determined.
- How the costs for tuition, room and board, books and supplies, travel, personal and miscellaneous expenses are considered in establishing the cost of education.
- The data (parental income, parental assets, student income, student assets, household size, etc.) that were considered in determining your expected family contribution.
- The college's refund policy.
- What portion of the financial aid is grant aid, and what portion must be repaid.
- How the college determines satisfactory academic progress, and the consequences for financial aid when the standards have not been satisfied.
- The appeal process to follow, when you question a decision that has been made or wish to present an extenuating circumstance

YOU HAVE THE RESPONSIBILITY TO

- Complete applications and promissory notes and submit them on time to the appropriate location.
 - Return all additional documentation, verification, corrections and/or new information requested by the Financial Aid Office.
 - Provide accurate information. In most instances, misrepresenting information on financial aid application forms is a violation of policy and may be considered a criminal offense that could result in indictment under the U.S. Criminal Codes.
 - Read and keep copies of all forms signed.
 - Notify the Financial Aid Office of the following information:
 - Changes in name
 - Changes in factors used to determine financial aid eligibility, including residency, housing plans, marital status, number of dependents, and academic major
 - Other sources of financial aid received during the period covered by the award letter
 - Reduction in credit hours during a semester
 - Withdrawal from the college after a semester is in session
-

VCCS SATISFACTORY ACADEMIC PROGRESS (SAP) POLICY

Federal regulations require that a student receiving federal financial aid make satisfactory academic progress in accordance with the standards set by the College and the federal government. These requirements include all terms of enrollment, whether or not aid was awarded or received. Satisfactory Academic Progress (SAP) standards also apply to state aid. Progress is measured throughout the ac program by the student's cumulative grade point average (Qualitative) and by credits earned as a percentage of those attempted (Quantitative or Pace of Completion). In addition, students must complete their programs of study before attempting 150% of the cre required to complete the program. The College Financial Aid Office will evaluate satisfactory academic progress before aid is awarded after grades are posted for every term, starting with the student's first term of enrollment. Some career studies certificate programs shorter than 16 credits in total length) are ineligible for student financial aid, but those credits will be counted toward all SAP require (GPA, Completion Rate, Maximum Timeframe, and Developmental Maximum) if the student later enrolls in an eligible program.

STUDENT FINANCIAL AID STATUS

A. Financial Aid Good Standing (GS) – Students who are meeting all aspects of the satisfactory academic progress policy or successfully following a designated academic progress plan.

B. Financial Aid Warning Status (WS) – Students who fail to meet satisfactory academic progress for the first time (excluding student have already attempted 150% of the credits required for their programs of study) will be automatically placed in a Warning Status fo (1) term and are expected to meet SAP requirements by the end of that term. Students who fail to meet satisfactory academic progre requirements at the end of the warning status term will be placed on financial aid suspension. However, with a successful SAP appeal students will be placed on financial aid probation and will retain financial aid eligibility.

C. Financial Aid Probation Status (PS) – Students who have successfully appealed financial aid suspension are placed in Probation Sta (PS). Students in Probation Status (PS) are eligible to receive financial aid for one (1) semester, after which they MUST be in Good S (GS) or meeting the requirements of an academic progress plan that was pre-approved by the College Financial Aid Office. (See "IV. for additional information.)

D. Financial Aid Suspension Status (SS) – Students who do not meet the credit progression schedule and/or the cumulative grade po average standard, or who fail to meet the requirements of their pre-approved academic progress plan, will be placed in Suspension S (SS). Students in Suspension Status (SS) are not eligible to receive financial aid.

E. Academic Suspension (AS) – Academic requirements for avoiding warning status and staying in school differ from financial aid requirements for Satisfactory Academic Progress. Academic status will be noted on registration records; financial aid status will be no financial aid pages in SIS. Any student suspended from the College for academic or behavioral reasons is automatically ineligible for aid.

EVALUATING PROGRESS

A. QUANTITATIVE STANDARDS OR PACE OF COMPLETION

Completion Rate (67% Rule): Students must, at a minimum, receive satisfactory grades in 67% of cumulative credits attempted. calculation is performed by dividing the cumulative total number of successfully completed credits by the cumulative total number of attempted. All credits attempted at the College (except audits, which must be entered as such by the class census date) are included. credits accepted in transfer count as both attempted and successfully completed credits. This evaluation will be made prior to aid beir awarded and after grades are posted at the end of each semester a student is enrolled at the College. Credits with satisfactory grades College are those for which a grade of A, B, C, D, S, or P is earned. Note: Federal-student loan borrowers must meet satisfactory acad progress requirements at the point of loan certification and again prior to the disbursement of any loan proceeds.

67% CALCULATOR

Credits Attempted		Minimum Credits Completed
	x 0.67	

Maximum Hours (150% Rule): In order to continue receiving financial aid, a student must complete his/her program of study befc attempting 150% of the credits required for that program. Developmental and ESL course work are excluded in this calculation. After credits from all enrollment periods at the College plus all accepted transfer credits are counted; whether or not the student received aid for those terms is of no consequence.

150% CALCULATOR

Credits Required		Maximum Credits Attempted
	x 1.5	

Transfer Students: In order to properly calculate satisfactory academic progress, transfer students who apply for financial aid must official transcripts from all other colleges attended. Transcripts must be submitted to the College Registrar. Credits officially accepted transfer will be counted in determining the maximum number of allowable semester credit hours for financial aid eligibility. The Colle

the option on an individual student basis to put a transfer student in Financial Aid Warning Status immediately upon evaluation for financial aid if academic history at previous colleges indicates a pattern of unsuccessful academic work.

Second Degree Students: Credits earned from a first degree or certificate must be counted if the student changes programs or attends a second degree or certificate. Depending on the circumstances, an appeal might be warranted.

ESL and Developmental Studies: Students may receive financial aid for a maximum of 30 semester hours of Developmental Studies courses as long as the courses are required as a result of placement testing, the student is in an eligible program of study, and SAP requirements continue to be met. ESL credits are unlimited in number as long as they are taken as part of an eligible program and SAP requirements continue to be met.

Additional Considerations for Quantitative or Pace of Completion Standards:

- Withdrawals (W grades) that are recorded on the student's permanent academic transcript will be included as credits attempted. These have an adverse effect on the student's ability to meet the requirements of the completion rate for financial aid.
- Incomplete Grades: Courses that are assigned an incomplete grade are included in cumulative credits attempted. These cannot be counted as credits earned in the progress standard until a successful grade is assigned.
- Repeated courses enable the student to achieve a higher cumulative grade point average. Students can repeat courses with financial aid until successfully completed but repeating courses adversely affects the student's ability to meet completion rate requirements. Financial aid can be considered for successfully completed classes that are repeated to achieve a higher grade but for only one additional attempt. Only the latest attempt will count toward the cumulative grade point average.

B. QUALITATIVE STANDARD

Cumulative GPA Requirements (GPA Rule): In order to remain eligible for financial aid consideration, 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.***

Total Number of Credits Attempted	GPA Requirement
1 - 15	1.5
16 - 30	1.75
31+	2.0

If you wish to estimate your GPA, you can use the [Back to College GPA Calculator \(http://www.back2college.com/gpa.htm\)](http://www.back2college.com/gpa.htm).

REGAINING ELIGIBILITY FOR FINANCIAL AID

Students who do not meet the credit progression requirements (Quantitative or Pace of Completion) and/or cumulative grade point average requirements (Qualitative) will be immediately ineligible for financial aid after any applicable Warning Status term. Removal from financial aid does not prevent students from enrolling without financial aid if they are otherwise eligible to continue their enrollment.

Unless extenuating circumstances exist and an appeal is granted (see [Appeal for Reinstatement of Aid \(http://www.virginiawest.edu/financialaid/reinstatement.php\)](http://www.virginiawest.edu/financialaid/reinstatement.php) for additional information), a student in financial aid suspension should expect to continue classes at her own expense until satisfactory academic progress requirements are again met.

Students who fail to meet these Satisfactory Academic Progress Standards and who choose to enroll without benefit of student financial aid may request a review of their academic records after any term in which they are enrolled without the receipt of financial aid to determine whether they have again met satisfactory academic progress standards. If the standards are met, eligibility is regained for subsequent enrollment in the academic year. Students should consult their campus financial aid advisors for assistance in appealing any element of this policy or to determine how to regain eligibility for financial aid.

VIRGINIA WESTERN :: FINANCIAL AID

APPEAL FOR REINSTATEMENT OF FINANCIAL AID

Under certain circumstances, students who fail to meet SAP standards and lose eligibility for financial aid can appeal the financial aid suspension. Students must clearly state what caused the suspension and must also clearly indicate what has changed that will now allow the student to succeed. Appeals are encouraged if:

- Extenuating circumstances exist (i.e., student's serious illness or accident; death, accident or serious illness in the immediate family or other mitigating circumstances), or
- The student has successfully completed one degree and is attempting another, or
- The student on suspension for other than Maximum Hours (150%), who has not yet met SAP requirements, has enrolled in and successfully completed at least 12 semester credits at the College with a minimum GPA of 2.0.

Students appealing a suspension must:

- Complete the College's SAP Appeal Form in its entirety (the form can be found on the forms page [here](#)),
- Attach documentation in support of the appeal, including meeting with an advisor to determine a plan of completion to graduate for 150% appeals, and
- Submit all items to the College Financial Aid Office.

Only complete appeal submissions, with documentation, will be evaluated by the Financial Aid Office. The decision is final. Depending on circumstances, the student could be required to complete additional requirements (i.e., see a career counselor or another type of advisor to meet with an advisor to develop an academic progress plan for completion, limit enrollment, etc.) before an appeal is granted. The goal is to help the student get back on track for graduation. The reasonableness of the student's ability to improve and again meet SAP standards to complete the student's program of study will be carefully considered. Appeals will be approved or denied. Students who have appeals approved will be in probationary status for the coming term. **During probationary status, the student must meet the condition: appeal as communicated to him or her by the Financial Aid Office, or the student will return to suspension.** If an academic progress plan has been pre-approved by financial aid, continuing to meet the requirements of that plan will put the student back into good standing.

[Appeal for Reinstatement of Financial Aid](#) (docx)

This form should only be used by students who are not in compliance with the 67% (or GPA) rule.

[Appeal for Continuation of Financial Aid](#) (docx)

This form should only be used by students who are not in compliance with the 150% rule.

EXAMPLES OF ACCEPTABLE DOCUMENTATION

DEATH OF IMMEDIATE FAMILY MEMBER

- Death certificate, or obituary, or memorial card
Note: Immediate family consists of parents, siblings, grandparents, household members. Proof of relationship may be required.

LEGAL ISSUES/ILLNESS

- Documentation from an appropriate professional must be on official letterhead or agency forms. Notes on prescription pads are acceptable.
- If not clear from the letterhead or other forms, the credentials of the professional must be provided.
- Date of onset and release from doctor's care.
- Dates of hospitalization, doctor's appointments, physical therapy, court appearances, etc.
- Doctor's opinion about readiness to return to school.
If documentation is of a sensitive nature, it may be submitted to Financial Aid/Veterans' Affairs, Room C106, 3094 Colonial Ave. Roanoke, VA 24015 where it will remain confidential.

APPLICABLE ONLY IF FAILING 150%

- Statement from academic advisor detailing proposed plan of action to successfully complete current program of study.
Note: Out of consideration for your advisor's schedule, you must allow a minimum of 3 business days prior to the appeal deadline.

Letters of support from family members, significant others, friends and neighbors are not sufficient documentation.

VIRGINIA WESTERN :: FINANCIAL AID

DROPS/WITHDRAWALS & YOUR ELIGIBILITY

Dropping or withdrawing from classes can affect both your financial aid eligibility and your award amount.

WHAT HAPPENS IF I SIMPLY DROP A COURSE DURING THE ADD/DROP PERIOD?

When you drop a course during the add/drop period, your financial aid eligibility for the current term will be revised to reflect the exclusion of the dropped course. Depending on how many remaining credits you have and what type of aid you have been awarded, your award may be reduced. You will receive a revised award notification if this is the case.

WHAT HAPPENS IF I DROP ALL OF MY COURSES DURING THE ADD/DROP PERIOD?

Your financial aid eligibility for the current term would be canceled entirely.

WHAT HAPPENS IF I WITHDRAW FROM A COURSE AFTER THE END OF THE ADD/DROP PERIOD?

If you are receiving grants, and you still have one or more remaining courses, your financial aid eligibility for the current term would change.

If you are receiving loans, you would only remain eligible for your loan disbursement provided you are still registered for at least six (half-time). If your enrollment level drops below half-time status before your loan disbursement has been applied to your account, you would not be eligible for your loan disbursement and it would be canceled. In certain circumstances, the College would be entitled to accept a partial amount of your loan disbursement that equals the balance due on your student account. Any remaining amount would be returned to the lender and would reduce the amount of the principal balance borrowed.

Keep in mind that if you are not maintaining half-time status, you would enter your grace period for repayment of any outstanding balance and would be sent an Exit Interview packet from the Financial Aid Office. Once you resumed half-time status, your loans could again be deferred.

WHAT HAPPENS IF I WITHDRAW FROM ALL OF MY COURSES AFTER THE END OF THE ADD/DROP PERIOD BUT BEFORE THE 60% OF THE SEMESTER (LAST DAY TO WITHDRAW WITHOUT ACADEMIC PENALTY)?

If you are receiving VGAP, CSAP, or PTAP, your eligibility for those grants would not change for that semester.

If you are receiving COMA or any type of federal aid (PELL, SEOG, or Federal Stafford Loans), a portion of your financial aid would be considered as unearned. As a result, you would then owe repayments to the U.S. Department of Education and to the College. You would be notified of the amounts you were responsible for repaying, and would be given a 45-day period to make repayment. If the amount owed to the federal government was not repaid within the given timeframe, this amount would be referred to the U.S. Department of Education as a federal liability. You would not regain eligibility for financial aid at any college or university in the United States until this federal overpayment was satisfied. Meanwhile, until the amount owed to the College was repaid, future enrollment at the institution would be denied. Your original award notice included detailed information regarding the effect of withdrawals on your financial aid eligibility.

HOW DO WITHDRAWALS AFFECT MY FUTURE FINANCIAL AID ELIGIBILITY?

As stated above, if you do not satisfy a federal overpayment, you would be reported to the U.S. Department of Education and would be ineligible for financial aid at any college or university until the debt was satisfied. Any outstanding balance due to the College would need to be satisfied before you could enroll again at Virginia Western Community College, and before any other future services would be rendered.

It is extremely important that you realize that all types of withdrawals can damage your pursuit of satisfactory academic progress. Although withdrawals may not be negative on your academic record, they are considered negative for financial aid purposes. Withdrawals are considered courses attempted, but not completed successfully. Therefore, according to our Satisfactory Academic Progress (SAP) policy, withdrawals would count against you in the evaluation of the Completion Rate (67% rule) and the Maximum Time (150% rule) standards.

WHAT SHOULD I DO IF I AM CONTEMPLATING WITHDRAWING FROM ONE OR MORE COURSES?

It is extremely important that you carefully read the above information in order to become fully aware of the implications of withdrawing. You may also meet with a financial aid representative to further discuss your options and any of the information provided here.

FINANCIAL AID SPECIAL CIRCUMSTANCES

The Financial Aid Office seeks to administer financial aid:

- in accordance with federal, state, and institutional regulations and policies,
- in a fair and consistent manner among students, and
- on a timely basis.

Within these parameters, the Financial Aid Office is committed to maximizing the qualifications of all financial aid applicants. A student who questions a decision that has been made, or who wishes to present an extenuating circumstance, is provided the opportunity to **file a written appeal** and have the situation further reviewed.

If you would like to file an appeal, contact the Financial Aid Office. Financial aid staff members can advise you regarding the procedures that follow.

Reasons for an appeal, though not limited to these, typically fall into one of the following categories:

- Loss of financial aid due to unsatisfactory academic progress;
 - The need to apply for financial aid as a dependent student and thus to provide parental information on the application;
 - A significant change in the household (e.g., marital separation of student or parents, loss or reduction of employment on part of student or parents, loss or reduction of untaxed income such as child support or Social Security benefits, death of parent, etc.);
 - Unusually high out-of-pocket medical/dental expenses;
 - Child care expenses during time spent at school;
 - Financial aid information provided was inaccurate or insufficient in nature;
 - Financial aid was not delivered in a timely manner.
-

VGAP RENEWAL REQUIREMENTS

Information on the VGAP grant can be found on the [State Grants page](#).

Renewal requirements are:

- Completion of a Free Application for Federal Student Aid (FAFSA) and demonstration of financial need
 - Continued enrollment in an eligible degree or certificate program
 - Continued domiciliary residency in Virginia
 - Academic achievement of at least 2.0 cumulative grade point average
 - Full-time status (at least 12 hours) throughout each semester of the academic year
 - Continuous enrollment (not counting summer sessions)
 - Remain a dependent student according to current federal regulations
-

REFUNDS OF UNEARNED TITLE IV FUNDS

The Financial Aid Office is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, be dismissed, or take a leave of absence having only completed 60% or less of a payment period or term. The federal Title IV financial aid programs must be recalculated in these situations.

If a student leaves the institution having only completed 60% or less of a payment period or term, the financial aid office recalculates eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV fund formula:

Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days of the payment period or term. (Any break of five days or more is not counted as part of the days in the term.) This percentage is also the percentage of earned aid.

Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula: Aid to be returned = (100% of the aid that could be disbursed minus the percentage of earned aid) multiplied by the total amount of aid that could have been disbursed during the payment period or term.

If a student earned less aid than was disbursed, the institution would be required to return a portion of the funds and the student would be required to return a portion of the funds. Keep in mind that when Title IV funds are returned, the student may owe a debt to the institution.

If a student earned more aid than was disbursed to him/her, the institution would owe the student a post-withdrawal disbursement which must be paid within 120 days of the student's withdrawal.

The institution must return the amount of Title IV funds for which it is responsible no later than 45 days after the date of the determination of the date of the student's withdrawal.

Refunds are allocated in the following order:

1. Unsubsidized Direct Stafford Loans (other than PLUS loans)
 2. Subsidized Direct Stafford Loans
 3. Direct PLUS Loans
 4. Federal Pell Grants for which a Return of funds is required
 5. Federal Supplemental Opportunity Grants for which a Return of funds is required
 6. Other assistance under this Title for which a Return of funds is required (e.g., LEAP)
-

CHARGING TEXTBOOKS

Students who wish to use their financial aid to purchase books and supplies from the college bookstore are required to complete and sign a Bookstore Charge Authorization Form each academic year. Once this form is on file with the Financial Aid Office, you may charge your purchases to your financial aid account on the dates shown below.

Spring 2015: January 7 - January 30

Summer 2015: May 19 – May 29

There will be no book charges after the dates listed above. If the books you need are on backorder, please speak with bookstore manager for special arrangements.

VWCC BOOKSTORE POLICY

Students must present a valid photo ID and their VWCC Student ID Number in order to charge textbooks and supplies to their account. Each student must sign a [Bookstore Charge Authorization Form](#) for each year the student plans to use his/her financial aid to make educationally related purchases at the bookstore. The Bookstore Charge Form gives permission to Virginia Western Community College's campus Bookstore to access the student's financial aid information for the purpose of charging books and supplies using financial aid while the student is enrolled. Additionally, students must understand the following information when purchasing at the bookstore:

- Signing the Bookstore Charge Authorization Form is voluntary, and is not needed if the student chooses to make purchases from a vendor other than the on-campus bookstore.
- You were awarded financial aid to help cover the costs of educationally related expenses during **your** attendance at Virginia Western Community College. These funds should only be used to purchase books and supplies that are required for the classes in which you are enrolled. These funds should NOT be used to purchase multiple copies of the same textbook during a single semester. Your financial aid funds are intended for purchases made by you, for you, and should never be used to purchase textbooks or supplies for other students, staff, or faculty members.

Failure to abide by this policy could result in disciplinary action from the College.

CONSORTIUM AGREEMENTS

Although a student might enroll concurrently at two or more institutions, financial aid can be received at just one institution during a period of enrollment. It is possible to be a financial aid recipient at one institution and to have the credits being pursued at another institution count toward enrollment status and the type(s) and amount(s) of financial aid received.

The institution from which the student receives financial aid is called the student's home institution, and any other institution is then to as a host institution. Students are responsible for paying their tuition at the host school.

Each year, Virginia Western Community College serves as both a home and a host institution under various [consortium agreement](#) consortium agreement must be in writing and signed by a representative of each institution.

In those cases where VWCC serves as the home institution, the courses from another institution that are counted toward a student's enrollment status must be courses that are currently needed toward completion of the degree or certificate program in which the student enrolled.

Contact the Financial Aid Office at 540-857-7331 to discuss a consortium agreement.

TITLE IV CODE OF CONDUCT

Colleges participating in any of the Title IV loan programs are required by the Department of Education to develop, publish, and enforce a code of conduct. The below code of conduct applies to all officers, employees, and agents of Virginia's 23 Community Colleges. It is in addition and not in lieu of, Section 3.3.3 of the VCCS Policy Manual, "Conflict of Interest in Employment."

BAN ON REVENUE SHARING AGREEMENTS

Neither the colleges within the Virginia Community College System (VCCS), nor any of their officers, employees or agents will enter revenue-sharing arrangements with any lender, which is defined by the Higher Education Opportunity Act of 2008, amending the Higher Education Act of 1965, Pub. L. # 110-315 (2008), ("HEOA") as any arrangement between a college and a lender that results in the lender paying a fee or other benefits, including a share of its profits, to the college, or its officers, employees or agents, as a result of the college recommending the lender to its students or families of those students.

BAN ON GIFTS

Financial Aid Office employees (or employees who otherwise have responsibilities with respect to education loans or financial aid) will not accept gifts from any lender, guaranty agency or loan servicer. A "gift" is defined as any gratuity, favor, discount, entertainment, honorarium, loan, or other item having monetary value of more than a de minimus amount. This prohibition is not limited just to those providers of Title IV loans but includes lenders of "private educational loans" as well. HEOA does provide for some exceptions related to specific types of activities or literature. This includes:

- Brochures or training material related to default aversion or financial literacy.
- Food, training or informational materials as part of training as long as that training contributes to the professional development of those individuals attending the training.
- Favorable terms and benefits to the student employed by the institution as long as those same terms are provided to all students at the institution.
- Entrance and exit counseling as long as the institution's staff are in control and they do not promote the services of a specific lender.
- Philanthropic contributions from a lender, guaranty agency or loan servicer unrelated to education loans.
- State education, grants, scholarships, or financial aid funds administered by or on behalf of the State.

BAN ON CONTRACTING ARRANGEMENTS

Financial Aid Office employees (or employees who otherwise have responsibilities with respect to education loans) will not accept any payment or financial benefit as compensation for any type of consulting arrangement or contract to provide services to or on behalf of a lender relating to education loans.

PROHIBITION AGAINST STEERING BORROWERS

The colleges and their officers, employees or agents will not steer borrowers to particular lenders, or delay loan certifications. This prohibition includes assigning any first-time borrower's loan to a particular lender as part of the award packaging process or through other methods.

PROHIBITION ON OFFERS OF FUNDS FOR PRIVATE LOANS

The colleges and their officers, employees or agents will not request or accept any agreement or offer of funds for private loans. This prohibition includes any offer of funds for loans to students at the institution, including funds for an opportunity pool loan, in exchange for providing concessions or promises to the lender for a specific number of loans, or inclusion on a preferred lender list.

BAN ON STAFFING ASSISTANCE

The colleges and their officers, employees or agents will not request or accept any assistance with call center staffing or financial aid staffing. However, HEOA does not prohibit schools from requesting or accepting assistance from a lender related to:

- Professional development training for financial aid administrators.
- Providing educational counseling materials, financial literacy materials, or debt management materials to borrowers, provided that the materials disclose to borrowers the identification of any lender that assisted in preparing or providing such materials.
- Staffing services on a short-term, nonrecurring basis to assist the school with financial aid-related functions during emergencies including State-declared or federally declared natural disasters, and other localized disasters and emergencies identified by the Secretary.

BAN ON ADVISORY BOARD COMPENSATION

Employees of the colleges will not receive anything of value from a lender, guarantor, or group in exchange for serving on an advisory board.

They may, however, accept reimbursement for reasonable expenses incurred while serving in this capacity.

RIGHT TO PRIVACY

The Family Educational Rights and Privacy Act (FERPA) of 1974 is a federal law that was enacted to protect the privacy of students and their educational records. The intent of the legislation is to protect the rights of students and to ensure the privacy and accuracy of "educational information."

The Act provides for the right of eligible students and parents to:

- inspect and review their educational records
- request an amendment to records that are believed to be inaccurate
- require the school to obtain written consent prior to disclosure of personally identifiable information, except those items noted
- file a complaint with the US Dept. of Education concerning alleged failures by the college to comply with FERPA
 - You may also call 800-USA-LEARN (800-872-5327) or visit <http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html> (<http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html>)
 - Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, D.C. 20202-5920

Educational Information refers to any record maintained by an educational institution, including files, documents, and materials of any kind which contain information directly related to students, and which allows a student to be identified.

WHAT IS NOT CONSIDERED EDUCATIONAL INFORMATION?

- Sole possession records or private notes held by educational personnel which are not accessible or released to other personnel
- Law enforcement or campus security records which are solely for law enforcement purposes
- Records related to individuals who are employed by the college
- Records related to treatment provided by a physician, psychiatrist, psychologist or other recognized professional
- Records of the college which contain only information about an individual obtained after that person is no longer a student at the college (i.e., alumni records)

RELEASE OF EDUCATIONAL RECORD

Students must authorize the release of their educational information/record by completing a [Student Information Release form](#) (Form 1) identifying a PIN number and third parties to whom information should be released. Third parties will need to identify the PIN number the student identifies before information can be released.

If a student is requesting an unofficial transcript of their records and has attended Virginia Western within the last three years, they should log into their MyVWCC account and download/print an unofficial copy of their transcript.

Current students may log into their MyVWCC account to request an official transcript of their records or complete, sign and submit a [Transcript Request form](#) (PDF).

WHO IS AN ELIGIBLE STUDENT UNDER FERPA AND HOW ARE THEY PROTECTED?

Students become "eligible" and are protected under FERPA when they begin attendance at a higher education institution or have been previously enrolled and have an education record, regardless of age or status in regard to parental dependency. Per VCCS Counsel, an individual is a student if he/she is or has attended a class and their information is in the Student Information System (SIS). FERPA rights continue after the student leaves the college and are only terminated upon the death of the student.

Either a parent or an eligible student—but not both—is entitled to assert rights under FERPA. *Parents of eligible students do not have rights under FERPA* (20 U.S.C. 123g(d); 34 C.F.R. 99.3).

A student does not need to be enrolled in a program of study to be an eligible student. If a student attends any kind of course or program offered by the college, he/she is then considered an eligible student.

Students who have applied, but not attended the institution, and deceased students are not protected under FERPA guidelines.

STUDENT'S RIGHTS UNDER FERPA

Eligible students have the right to inspect and review their educational records within 45 days of submitting a written request to Virg

Western. The student must submit the request to the Registrar and identify the records they wish to inspect. The Registrar will then make arrangements for access and notify the student of the time/place where the records may be inspected. The college is not required to provide copies of records unless for reasons such as great distance where it is impossible for the student to review the records.

A student may also ask the college to amend a record believed to be inaccurate or misleading. If the school decides not to amend the record, the eligible student then has a right to a formal hearing. If, after the hearing, the school still chooses not to amend the record, the student has the right to place a statement with the record commenting on the contested information.

A student may formally request that Virginia Western not release Directory Information on their behalf by submitting a [Student Request for Non-Disclosure of Records](#) (PDF) to the Records Office or by changing the privacy settings in the Student Center through their VWCC account. Once this request has been made, every reasonable effort will be made to safeguard the confidentiality of directory information.

Once an official request of non-disclosure has been made, the student will not be permitted to request an official or unofficial transcript online in the college's student information system. The student will be required to submit written authorization, with proof of identity to the Records Office before a transcript will be released. Additionally, Virginia Western staff will not respond to phone calls from potential employers to verify enrollment for students who have submitted an official request of non-disclosure without the student's written authorization. This request will remain in effect until the student submits a written notice to remove the restriction or they update their VWCC account.

Students must be notified when the college receives a subpoena or court order requiring disclosure of the educational record before the college complies with the request.

Lastly, students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with FERPA.

PARENTS RIGHTS UNDER FERPA

Parents lose their FERPA rights when their child turns 18 or starts attending or taking classes in college (or any post-secondary institution) whichever happens first.

Under 20 USC 1232g(d) all rights of parents (including the right to inspect educational records and to consent to the disclosure of personally identifiable information) transfers to the student at the earlier of: 1) the attainment of age 18, or 2) attendance at an "institution of postsecondary education".

However, as stated later in this document, parents of a *financially dependent student*, defined by the Internal Revenue Service (IRS), obtain their dependent student's records, after submitting proof of the student's dependency (via most recent federal tax form). Required information will not be released prior to the submission of this documentation.

Students can authorize the release of their education information to a parent, spouse, or other third party by completing an [Information Release Form](#) (PDF).

Faculty and staff need to be very careful when a parent calls and asks for information about a student. If there is not a Student Information Release form on file, the parent cannot identify the PIN number assigned by the student, and proof of financial dependency has not been established, disclosure – even to a parent – is unlawful.

Other than the financial dependent exception - which, again, requires documentation - the college may disclose non-directory information to a parent in these specific instances:

- Upon the student completing a Student Information Release form naming the parent and identifying a PIN number that the parent can identify. (Preferred)
- When the student is under the age of 21 and violates college rules regarding the use of alcohol or controlled substances.
- In the case of a health or safety emergency, if the knowledge of the information is necessary to protect the health or safety of the student or others.

WHEN IS A STUDENT'S CONSENT NOT REQUIRED?

There are several exceptions to releasing information without a student's written approval. Some examples are:

- school officials with "legitimate educational interests", i.e. dual enrollment high schools;
- other schools to which a student is enrolled or seeking to transfer;
- parents (or Custodial Parents) of a dependent student (defined by the IRS). A parent may obtain their dependent student's records if they must submit proof of the student's dependency (via most recent federal tax form) prior to receiving requested information. This information must be updated yearly for the parent to continue to have access to their dependent student's records.
- specified officials for audit or evaluation purposes;
- appropriate parties in connection with financial aid;
- organizations conducting certain studies for or on behalf of the school;
- to comply with a judicial order or lawfully issued subpoena;

- to comply with the Solomon Amendment;
- appropriate officials in cases of health and safety emergencies;
- the Virginia State Police and in accordance with the Wetterling Act regarding sexual offenders;
- State or local authorities auditing or evaluating federal or state supported education programs or enforcing federal laws which include those programs;
- state and local authorities, within a juvenile system, pursuant to specific State law; and
- parents of a student under the age of 21 who violates the college rules and/or federal/state or local laws regarding the use of a controlled substances.

WHO IS CONSIDERED A "SCHOOL OFFICIAL"?

- a person employed by or under contract with the college in an administrative, supervisory, academic, or support staff position;
- a person serving on the Virginia Western Local Advisory board;
- a person or firm retained by the college to perform professional services, such as legal, accounting, or auditing services; or
- a person or company under contract with the college to manage or perform operations functions, such as the college bookstore

WHAT IS "LEGITIMATE EDUCATIONAL INTEREST"?

- Legitimate educational interest means a school official has a "need-to-know" regarding specific information in a student's record that directly relates to the school official's job duties. Legitimate educational interest refers to any authorized interest or activity undertaken in the name of the college.
- Legitimate educational interest exists when the school official is performing a task related to a student's education or is providing a service or benefit to the student.
- It exists when the school official is maintaining safety and security on campus.
- Access to an educational record must be necessary or appropriate to the operation of the college or to the proper performance of the college's educational mission of the college.

DISCLOSURE OF EDUCATION INFORMATION/RECORDS

DIRECTORY INFORMATION

Disclosure means to permit access to or the release, transfer or other communication of personally identifiable information contained in education records by any means (oral, written, electronic, etc.), to any party *except* the party that provided or created the record.

Generally, the college must have written permission from a student before releasing information from the student's record. One exception to this rule is categorized as "**Directory Information.**"

Directory Information is personally identifiable information which includes educational information/records that would not generally be considered harmful or an invasion of a student's privacy. This information **may be disclosed to a third party** without a student's written authorization. **Although directory information may be disclosed, the college is in no way obligated to release such information.**

Additionally, even though these items have been deemed Directory Information, it is the practice of the college to avoid releasing a student's address or telephone number without written authorization.

Virginia Western has classified the information listed below as Directory Information.

- Student name
- Address, E-mail Address, Telephone Number
- Dates of attendance
- Number of credit hours enrolled
- Grade level
- Major field of study
- Degrees received
- Awards and honors
- Photos
- Most Recent Educational Agency or Institution Attended
- Participation in Officially Recognized Activities and Sports
- Weight/height of members of athletic teams

Please Note: The college reserves the right to publish the names of students who receive academic honors.

NON-DIRECTORY INFORMATION

The following information does not fall into the category of Directory Information at Virginia Western. Outside of the exceptions listed, **this information cannot be disclosed without the student's written authorization:**

- **Grades or GPA**
- **Social Security # or EmplID**
- **Student's Race or Gender**
- **Date and Place of Birth**

If you have any questions or concerns regarding these guidelines, please feel free to direct your questions (or requests for information)

VWCC Records Office
P.O. Box 14007
Roanoke, Virginia 24038-4007
Telephone: 540-857-7236
Fax: 540-857-6102

A copy of the FERPA Guidelines is available from the Records Office or [can be accessed here](#) (PDF).

STUDENT SERVICES

ACADEMIC RESOURCES

[Academic Calendar](#)
[Brown Library](#)
[Campus Bookstore \(http://www.vwcc.bkstr.com/\)](http://www.vwcc.bkstr.com/)
[College Catalog](#)
[Course Outlines](#)
[eLearning & Instructional Technology](#)
[Final Exam Schedule \(PDF\)](#)
[Placement Testing](#)
[Testing Center](#)

STUDENT LIFE

[Campus Facilities](#)
[Clubs & Organizations](#)
[Sports & Recreation](#)
[Student Activities](#)
[Student Bulletin](#)
[Student Government](#)
[Student ID Cards](#)
[Volunteer Opportunities](#)

TECHNOLOGY

[Computer Labs](#)
[Help Desk](#)
[Help Desk Live Chat](#)
[Navigate My VWCC](#)
[Printing](#)
[Technology for Students](#)
[VWCC Mobile App](#)

OTHER SERVICES

[Bus Info - Valley Metro](#)
[Campus & Community Resources](#)
[Campus Police & Safety](#)
[Services for Veterans](#)
[Intervention Counselor](#)
[Parking](#)
[Resources & Services for Students](#)
[Student Consumer Information](#)
[Student Health Insurance](#)
[Voter Registration Information](#)

ACADEMIC SUPPORT

[Academic Advising](#)
[Alliance for Excellence](#)
[Disability Services](#)
[Faculty Advising](#)
[Financial Aid](#)
[Graduation](#)
[Hall Associates Career Center](#)
[Honors Societies](#)
[International Students/Education](#)
[REACH/Student Support Services](#)
[Student Records](#)
[Transfer Advising](#)
[Tutoring](#)

POLICIES

[Campus & Workplace Violence Prevention Policy](#)
[Email Communication](#)
[FERPA \(Right to Privacy\)](#)
[Grading System](#)
[Inclement Weather & Delayed Schedule Policy](#)
[No-Show & Withdrawal Policy](#)
[Refund Policy](#)
[Student Conduct Policy & Procedure](#)
[Student Grievance Policy & Procedure](#)
[Student Rights & Responsibilities](#)

(additional policies can be found on the [College Policies](#) site)

GUIDELINES AND POLICIES FOR COMPUTER USE

- [Use of Electronic Communications and Social Media \(http://www.dhrm.virginia.gov/hrpolicy/pol175UseOfInternet.pdf\)](http://www.dhrm.virginia.gov/hrpolicy/pol175UseOfInternet.pdf)

The purpose of this policy is to ensure the appropriate, responsible, and safe use of electronic communications and social media employees. This policy establishes minimum standards for all state employees. Agencies may supplement this policy as necessary as long as such supplement is consistent with this policy...

VIRGINIA COMMUNITY COLLEGE SYSTEM GUIDELINES & STANDARDS

- [Information Technology Employee Acceptable Use Agreement](#) (PDF)

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...

- [Information Technology Student/Patron Acceptable Use Agreement](#)

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...

- [Virginia Community College Systems Information Security Standard](#)

The Virginia Community College System (VCCS) provides shared information technology resources and services to faculty, staff and college patrons, collectively "Users," for activities supporting the VCCS mission. The purpose of this standard is to protect the integrity of VCCS Technology Resources and the Users thereof against unauthorized or improper use of those resources. The following standard describes responsible behavior expected by those given access to the technology resources and services. The System Office Information Technology Office provides practical guidelines for the application of this standard and general oversight to govern the implementation...

VIRGINIA WESTERN TECHNOLOGY USE POLICIES

- [WVCC Information Technology Use Policy](#) (PDF)

The purpose of this policy is to ensure the appropriate, responsible, and safe use of electronic communications and social media employees. This policy establishes minimum standards for all state employees...

- [WVCC Information Technology Use Policy Q & A](#) (PDF)

The document contains answers to some of the most frequently asked questions regarding technology use at Virginia Western. If you do not find your answer here contact the Help Desk directly at:

Email: helpdesk@viriniawestern.edu

Live Chat

Phone: 540-857-7354



Virginia Western Community College (VWCC)

Information Technology Use Policy

[Back to Guidelines and Policies](#)

Information transmitted is not private and will be monitored as business needs dictate.

- Equipment, transmissions, and online access are all the property of VWCC.
- VWCC reserves the right to monitor and inspect all computers and transmissions as business needs dictate.
- All of the movements you make on your computer system can create a permanent record.
- VWCC's name and individual user-ID are included on every electronic message.

VWCC prohibits illegal and inappropriate use of your electronic system. Illegal or inappropriate use includes:

- Downloading software for personal use.
- Downloading games, material, or software from the Internet unrelated to college business.
- Gaining unauthorized access to private servers.

No unauthorized third party access is permitted.

- No employee may give an unauthorized third party access to VWCC information systems or computers for any reason without management approval.

Copyright and trademark protections apply to Internet usage.

- Do not send, download, or save any material from any online source that is protected by copyright or trademark laws.

You need to protect against external viruses.

- Be sure that your computer is actively screening for viruses using Symantec AntiVirus software.
- Contact the Help Desk (7-7354) if you have any questions concerning your antivirus software.

Last modified on 09/14/06

[Back to Guidelines and Policies](#)

OFFICIAL E-MAIL COMMUNICATIONS WITH STUDENTS

VCCS has established e-mail as a primary vehicle for official communication with students. An official VCCS Gmail e-mail address has established and assigned by the VCCS and the colleges for each registered student, and current faculty and staff member. All communication sent via e-mail will be sent to the students Gmail address. Faculty members will use their official VCCS e-mail address to communicate with a student registered in their classes and administrative units will correspond with students via this address.

The VCCS expects that students will receive and read e-mail in a timely manner. Students are expected to maintain their accounts and check their e-mail periodically so that new mail will be properly received and read. A student's failure to receive and read official college communications delivered to their Google e-mail address in a timely manner does not absolve that student from knowing and complying with the content of such communications.

While students are allowed to redirect e-mail from their official VCCS e-mail address to another address (e.g. @hotmail.com, @aol.com) do so at their own risk. The VCCS is not responsible for the handling of e-mail by other service providers. Having e-mail redirected does not absolve students from knowing and complying with the content of the communication sent to their official College e-mail address.

- Temporary restriction of the violator's computing resource access for a fixed period of time, generally not more than six months;
- 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.

In the event that a student is the offender, the accuser should notify the Vice President of Academic and Student Affairs. The VP, in cooperation with the CIO, will determine the appropriate disciplinary actions that may include but are not limited to:

- Temporary restriction of the violator's computing resource access for a fixed period of time, generally, not more than six months;
- 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.
- Disciplinary action for student offenders shall be in accordance with the college student standards of conduct.

VIRGINIA WESTERN :: CAMPUS POLICE

PARKING REGULATIONS, POLICIES AND FINES

Revised May 2012

PURPOSE

Provide students, employees, and visitors with a sufficient and well-regulated parking environment. Monitor and enforce designated parking, as well as maintain the smooth and orderly flow of vehicular traffic while negotiating individual lots. Maintain the safety of pedestrians, vehicles and buildings by regularly enforcing handicap, police, facility maintenance, fire lane and other designated and n parking which is paramount to the smooth operation of the College.

APPLICABILITY

This policy applies to all Virginia Western Community College (VWCC) employees, students, guests and visitors.

POLICY

The College has reviewed and established a schedule of parking violations and fines approved by the College Board. These violations fines are established to encourage the regulation and conformance of parking regulations by students, employees, guests and visitors policy and supporting documents replace all previous parking procedures and fine schedules established between the College and the Roanoke.

PARKING PERMITS

STAFF AND FACULTY

All staff and faculty are required to display a parking hangtag on their vehicle. This tag shall be displayed by hanging it from the rear mirror with the tag number facing out of the windshield. If for some reason the tag is unable to be properly displayed (motorcycle, convertible, etc) the staff or faculty member shall contact campus police for alternative permit display options. There is no fee associated with staff/faculty parking hang tags. Permits must be relinquished upon resignation or termination of employment.

VISITORS, GUESTS, CONTRACTORS AND VENDORS

Temporary parking permits will be issued as needed upon request to the Virginia Western Campus Police Department or their designee. Temporary Parking Permits will establish the parking expectations and limitations for the permit user. Issuance of a Temporary Parking Permit does not diminish the requirements and regulations contained within this policy.

STUDENTS

Students will not be issued parking permits. Students are expected to abide by all parking regulations established by the College or its representatives. Students found to be in violation of the College's parking regulations may be issued a parking violation ticket, a written warning and/or be subject to the Student Conduct Hearing and Review process.

PARKING VIOLATIONS AND FINES

VIOLATION	FINE
Overtime Parking	\$20.00
Loading Zone	\$20.00
Faculty/Staff Parking Only	\$20.00
Parking in Non-designated Area	\$20.00
No Parking/Standing	\$20.00
Restricted Parking	\$20.00
Improper Display of Placard (Disabled)	\$20.00
Blocking Traffic	\$20.00
Parking Wrong Direction	\$20.00
Too Close to Corner/Intersection (15 feet)	\$20.00
Parking On Sidewalk	\$20.00
Parking in or Along Grass	\$20.00
Fire Hydrant (within 15 feet)	\$50.00
Fire Lane	\$50.00
Disabled/Handicap Parking Only	\$50.00

PAYMENT AND FINES

1. Tickets issued by officers will be printed on an envelope developed for this purpose. The ticket envelope will identify the date a of violation, registered license plate and state, type of vehicle and color, location of offense, and type of violation and commensurate fine. Directions related to payment, payment deadline and/or administrative relief will also be included on this envelope.
2. Tickets must be paid within 30 calendar days of issuance.
 - a. Payments not made within 30 days will result in a hold being placed on the student's account. The hold shall prevent the student from registering for classes, receiving grades and/or transcripts and from graduation. For vehicles registered to non student staff members, a hold shall be placed upon the student's account affiliated with the registered owner of the vehicle. Ex: When a son or daughter drive a vehicle registered to their parents, the vehicle information received through Virginia DMV is used to determine the violator's identity and a hold will be placed upon the student's account.
 - b. Persons receiving three (3) violations during a semester that remain unpaid and outstanding will be identified as violating the College's Student Rules of Conduct. These student violators will be forwarded to the Dean of Student Services and a hearing will be scheduled before the Student Conduct Committee. Students may then risk suspension or expulsion from the institution.
3. Payments must be made to the Virginia Western Cashier Office located in Chapman Hall during normal business hours.

ISSUING TICKETS FOR VIOLATIONS

1. Campus Police and Security Officers are authorized to issue tickets or warnings for parking violations. Officers utilize judgment and discretion when issuing parking ticket violations. This discretion is held solely by the issuing officer and the officer's supervisor. Officer discretion is not directed, controlled or influenced by college administration.
2. Officers shall properly and completely fill out a ticket envelope. The information contained on the envelope shall establish: date of violation, registered license plate and state, type of vehicle and color, location of offense, and type of violation and commensurate fine. The officer's signature and shield number shall also be recorded.
3. Each ticket will consist of three copies. The original copy (white) will be submitted to the Cashier Office for use in reconciling payments. The second ticket copy (yellow) will be held by the Campus Police Department for tracking and recordkeeping purposes. The remaining envelope (red) will be left with the violator's vehicle, affixed to the windshield under the driver side wiper blade, in a practicable location for ease of payment.

APPEAL PROCESS

1. Initial appeals for parking violations may be made in person to the issuing officer within seventy two (72) hours of the violation.
2. All other appeals shall be made in writing to the Chief of Police or designee within seven (7) business days of the issuance of the ticket. Written appeals must be submitted utilizing the college's "[Right of Appeal" application \(PDF\)](#). No appeal will be considered beyond seven (7) days of the violation.
3. A formal response to the appeal will be made within seven (7) business days by the Campus Police Chief or his/her designee. All decisions on appeal are final.

SPECIAL EVENT PARKING

1. The Chief of Police or his/her designee reserves the right to suspend the issuing of tickets for violations during special events.
2. Grass areas may be opened to parking during special events at the discretion of the Chief of Police.
3. Parking in Fire Lanes is strictly prohibited at all times regardless of event or reason.

TOWING OR REMOVAL OF VEHICLES

1. The College reserves the right to remove vehicles from its property that are creating a safety hazard, blocking traffic, parked in a lane, parked in a handicapped space without properly displayed verification of handicap status, or if the vehicle is disabled or leaking excess fluid contaminants into the lot that may suffuse into the Roanoke Valley watershed.
2. Owners and/or operators of towed vehicles must check with the Campus Police Department for information regarding the reason for tow and the contact information for the towing service.
3. Virginia Western Community College and its agents are not responsible for fees, damage or loss incurred during the towing, nor will the College be held liable for any subsequent vehicle storage fees established by the towing contractor. Towing expenses are not appealable, nor are the violations which generated the need for the vehicle's removal.
4. Vehicles may be towed without notification of the owner/operator under a variety of circumstances. For example: A vehicle may be towed without notification to the owner/operator when it prevents the college from fulfilling its mission (in relation to class delivery parking in the motorcycle parking lot over a weekend when classes are scheduled) or for exigency or safety.

DEFINITIONS

"College" – for the purpose of this policy the "College" shall mean the physical space operated as Virginia Western Community College as well as the Executive and Governing members of its administration.

"Campus Police Officer" – duly certified law enforcement officer meeting all required Department of Criminal Justice Services (DCJS) standards and who are affirmed and sworn through the Circuit Court of the City of Roanoke.

"Campus Security Officer" – Any person employed by the College who is trained as a Security Officer under the criteria set forth by

"Administration" – refers to any college President, Vice President or their respective designee.

PARKING VIOLATION GENERAL DEFINITIONS

Overtime Parking – vehicles parked in excess of the posted time limits. Posted time limits vary according to signage and location.

Loading Zone - vehicles parked within a posted loading zone without proper authorization.

Faculty/Staff Parking Only – vehicles parked in faculty/staff parking lots without proper VWCC hangtag displayed.

Parking in non-designated area – vehicles parked in areas not designated for parking.

No Parking/Standing – vehicles parked or left standing while occupied or not in areas designated as no parking, no stopping or standing.

Restricted Parking – vehicle parking in areas specifically designated by signage for a unique user group including but not limited to parking, Career Center parking, Workforce Development parking, etc.

Improper display of Placard (Disabled) – failure to properly display handicapped parking placard from windshield when parking in designated handicapped parking location.

Blocking Traffic – parking a vehicle in such a manner as to inhibit, endanger or alter the free and safe flow of traffic.

Parking Wrong Direction – parking a vehicle in such a direction in which it faces oncoming traffic and may create a hazard to traffic if the vehicle is initially moved into the travel lane.

Too close to corner/intersection (15 feet) – vehicles parked within 15 feet of a traffic intersection in such a manner as to potentially create a limited line of sight and danger for vehicles entering said intersection.

Parking on Sidewalk – any vehicle parked on or partially parked on a sidewalk. This excludes Virginia Western Campus Police and Maintenance and designated contractor vehicles.

Parking in or along grass – parking in any fashion on a grassy area controlled and/or owned by the college without express permission. The Chief of Police is prohibited.

Fire Hydrant (within 15 feet) – vehicles that park within 15 feet of a fire hydrant.

Fire Lane – parking, stopping or standing in a designated fire lane. Fire lane may be designated by posted sign or by yellow curb or lane markings.

Disabled/Handicap Parking only – parking in a designated handicapped parking space without a proper and current Division of Motor Vehicles handicapped placard hung in such a manner to be clearly visible through the windshield. (Code of Virginia 46.2-1241. Issued with disabled parking placards)

AUTHORITY AND REFERENCE

Code of Virginia as amended, Title 46.2 Motor Vehicles

Section 4.3.1.5 of the VCCS Policy Manual requires colleges to utilize parking as an auxiliary enterprise to collect revenues for the construction, repair and maintenance of college parking facilities including maintenance, replacement, and repair of outdoor lighting, sidewalks, and other infrastructure facilities.

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-39 – ACADEMIC LOAD

Policy Number: I-39

Last Reviewed: March 18, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

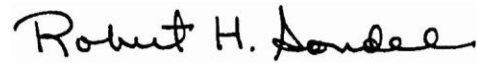
Academic Load

The normal academic course load for students is 15-17 credits. The minimum full-time academic course load is 12 credits. The maximum full-time load allowed is 18 credits during the fall and spring semesters and 12 credit hours during the summer semester, excluding Student Development courses (SDV 100, 108 or 101).

Students wishing to exceed these maximum full-time loads must complete and submit an *Academic Overload Request Form* to the Admissions Office for review by the Admissions Office Manager. Students must possess a 3.0 GPA in order to qualify for academic overload. No student will be permitted to exceed 22 credits during the fall or spring semester or 16 credits during the summer semester.

Students will be required to take less than the minimum full-time academic load if they are on academic probation.

Approved by



Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Review/Revised: 3/2014

PLACEMENT TESTING

[Preparing for the Virginia Placement Test Workshop Registration](#)

Placement testing is required of most students before beginning classes at Virginia Western. All students who are entering a program or enrolling in any courses requiring a mathematics or English prerequisite ([Description of Courses \(http://www.viriniawestern.edu/catalog/96-Description-of-Courses.pdf\)](http://www.viriniawestern.edu/catalog/96-Description-of-Courses.pdf)) (includes transfer students who do not have credit in mathematics or English) must take the Virginia Placement Test (VPT).

Students must submit their [applications for admission \(http://viriniawestern.edu/studenthelp/student/applyonline.php\)](http://viriniawestern.edu/studenthelp/student/applyonline.php) to Virginia Western before taking the placement tests. Placement testing must be completed prior to meeting with an academic adviser to establish course schedule.

Students can retake the placement test one time within 12 months of the initial attempt of the VPT.

[Information for VPT Administrators](#)

EXEMPTIONS FOR PLACEMENT TESTING

New students are exempt from taking the placement tests if they have taken the SAT and received a score of 500 or above on critical reading and writing and/or 520 or above on math, or if they have taken the ACT and received a combined score of 21 or higher in the English writing and/or a score of 22 or higher in math. Students must bring a copy of their scores with them to their counseling/advising appointment. Scores are valid for two (2) years from the testing date.

ABOUT THE VIRGINIA PLACEMENT TEST

The VPT is a computerized test composed of two separate assessments, English and math. Each test will take between 2 and 3 hours to complete. Students needing to complete both tests should consider taking them on separate days to avoid fatigue. Individual testing times depend on how long it takes the test taker to answer the questions and how consistently he or she answers the questions.

Placement tests are not graded per se; they are simply used to place students into appropriate courses. However, students should put their best effort into these tests to demonstrate a readiness to take college level courses and to avoid being placed into courses that may require remediation.

VPT English

- The English test has two parts: a written essay component and a multiple choice component.
- The written essay is more heavily weighted in the total English score. Students should take their time and write a complete essay to the best of their ability.
- During the essay component, students will be asked to write a well-developed essay response to one of two prompts provided on the test.
- Computerized help tools such as spell check and auto correct will not be available.
- Once students start the essay portion, they will need to complete it without leaving, except in a case of extreme need.
- Multiple choice component - Students will answer 40 multiple-choice questions on reading and writing fundamentals.

VPT Math

- Students must take a math placement test before enrolling in any math course. Some other courses such as science and computer science courses also require a qualifying score on the math placement test. Some programs such as nursing require a qualifying score on the math placement test.
- Students can use the electronic calculator that is provided as a pop-up window that is part of the mathematics test. The calculator is a basic four function model with a square root button. It appears on all questions except for the section on basic arithmetic. (Most students will not see this part of the test.)
- We strongly recommend that students, who wish to test into Calculus, practice with a four function calculator instead of a graphing calculator.
- Personal calculators of any kind cannot be used.

PREPARING TO TAKE THE VIRGINIA PLACEMENT TEST WORKSHOPS

We are currently offering a series of workshops for potential students who wish to maximize their placement scores by reviewing the elements covered in the English and Mathematics components of the Virginia Placement Test. This should assist students in receiving an accurate placement recommendation.

All workshops will run for 2.5 hours and will be held in B112 on the Main Floor of the Brown Library. *Registration is required!*

VPT English Workshops:

Tuesday, November 4 – 9:30 AM - 12:00 Noon

Thursday, November 13 – 5:30 PM - 8:00 PM

VPT Basic Mathematics Workshops (Units 1-5):

This workshop is designed to help you prepare for the VPT- Mathematics assessment if you are intending to pursue a program of study as English, journalism, humanities, liberal arts, fine arts and graphic design, human services, education, culinary arts, criminal justice, administrative support technology or a trades-related program (air conditioning and refrigeration, electrical wiring, etc.)

Wednesday, November 5 – 9:30 AM - 12:00 Noon

Tuesday, November 11 – 5:30 PM - 8:00 PM

VPT Advanced Mathematics Workshops (Units 6-9):

This workshop is designed to help you prepare for the VPT- Mathematics assessment if you are intending to pursue a program of study that requires significant mathematics coursework, such as science, technology, engineering, mathematics, business, and the health professions.

Thursday, November 6 – 9:30 AM - 12:00 Noon

Wednesday, November 12 – 5:30 PM - 8:00 PM

[Click here to register for any of these workshops.](#)

For further assistance please email testingcenter@virginiawestern.edu or call 540-857-7250.

PREPARING TO TAKE THE VIRGINIA PLACEMENT TEST

When students prepare to take the placement tests, the importance of reviewing material that has previously been studied cannot be emphasized. The placement test is not an admissions test or an aptitude test. The test measures how well students demonstrate skill proficiencies which will indicate the courses they are prepared to take. Not reviewing before taking the placement test could place students into courses that are below their actual skill level. This can delay a student's progress by one or more semesters, causing disruption in sequencing and costing extra time and money.

Students are highly encouraged to start the review process early to provide enough time to practice and to build confidence in taking the placement test. This will ensure the most accurate course placement for each student.

Students looking for further assistance in preparing to take the VPT can sign up for individual tutoring support in the Testing Center.

VPT PREPARATION RESOURCES

VPT English

This document is intended to help students review for the VPT-English Test. It should prove useful whether students use these resources before or after taking the VPT-English Practice Test. The document is arranged according to six broad categories. Each category includes to specific online resources as well as bulleted lists of activities that students will find at the online sites.

1. Additional Assessments and Practice Tests
2. Reading Comprehension and Vocabulary
3. The Writing Process
4. Grammar and Mechanics
5. Editing and Proofreading
6. Research and Documentation

[Online Resources for VPT English Review](#) (pdf)

(All links were verified on December 7th 2012.)

VPT Math

This site is designed to help students prepare for the Mathematics placement test by strengthening existing skills and brushing up on skills that need improvement. This interactive site asks sample questions and checks the answers before allowing students to move on. If a student gets an incorrect answer, links to outside resources on that specific topic are suggested for further review.

Note: At this point, Math Site is a pilot, containing only resources for the first three units of the VPT Math.

[VPT Math Practice Site \(http://vccsblogs.com/math/?p=16\)](http://vccsblogs.com/math/?p=16)

PRACTICE TEST

Students can take a diagnostic practice test in VPT English, math, or both. Following the practice test, students are able to view their scores and receive feedback on which areas they can benefit from further review.

[Click here for further instructions on taking the VPT practice test.](#)

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-7 – PLACEMENT TESTING

Policy Number: I-7

Last Reviewed: March 18, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC & STUDENT AFFAIRS

Placement Testing

All curricular and dual enrollment students must complete college placement tests or submit documentation of a qualifying exemption to placement testing upon admission to the college. Additionally, non-curricular students desiring to enroll in courses with prerequisites are required to complete relevant placement tests.

Placement test scores are valid for two years from the date of completion. Students who complete the placement test and do not enroll in developmental education courses are allowed one test and one re-test within twelve months. Students who attempt developmental education courses are ineligible for a re-test. Exceptions to this policy may be made on a case-by-case basis in accordance with established procedures (see Re-test Exemptions below).

7.1 Qualifying Placement Test Exemptions- Mathematics

Students who provide official evidence of any of the following qualify for exemption from the mathematics placement test. Students qualifying for this exemption are permitted to enroll in any entry-level mathematics course (MTH 166, MTH 163, MTH 157, MTH 151, MTH 152, MTH 120).

- 520 SAT- Mathematics score completed within the last two years
- 22 ACT- Mathematics scores completed within the last two years
- Completion of a Bachelor's degree from a regionally accredited institution

7.2 Qualifying Placement Test Exemptions- English

Students who provide official evidence of any of the following qualify for exempti English placement test. Students qualifying for this exemption are permitted to e 111.

- 500 Critical Reading & 500 Writing SAT scores completed within the last two years
- 21 English & 21 Reading ACT scores completed within the last two years
- Completion of a Bachelor's degree from a regionally accredited institution

7.3 Qualifying Placement Test Exemptions- Dual Enrollment Admissions Criteria

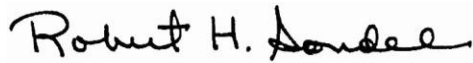
For additional information regarding exemptions to placement testing for Dual Enrollment (High School and Home School) Student Admission, please see the [General Admissions Policy](#).

7.4 Re-test Exceptions

A developmental education instructor may recommend a student for an exception to the re-test policy by submitting a *Re-test Policy Exception Petition* to the appropriate academic dean for approval. All students completing non-credit English courses are eligible for a re-test policy exemption in order to complete the placement test as their final exam in the class. Possible justifications for requesting a re-test policy exemption may include:

- The student is completing a non-credit English course and is completing the placement test as their final exam in the course.
- The student receives an “R” in a developmental English course, but the instructor believes the student may be prepared to move into a higher-level English course
- The student has made significant progress towards the completion of developmental mathematics units, but the semester ended before the student could complete the final exam for the unit.

Approved by



Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Reviewed/Revised: 10/2012; 11/2013; 3/2014

VIRGINIA WESTERN COMMUNITY COLLEGE
I – ACADEMIC & STUDENT AFFAIRS POLICIES
I-43 – STUDENT DEVELOPMENT (SDV)

Policy Number: I-43

Last Reviewed: March 18, 2014

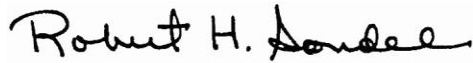
Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

Student Development (SDV)

All students seeking a degree or certificate, except those in career studies certificate programs, are required to complete an approved student development course (SDV 100, SDV 108, or SDV 101). This course must be completed within the first 15 credit hours of enrollment. Only SDV 100, SDV 108, or SDV 101 may be used to satisfy graduation requirements.

This student development requirement may be waived for students who hold an Associate's degree or a Bachelor's degree from a regionally accredited institution.

Approved by



Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Review/Revised: 12/2012; 3/2014

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-42 – REPEATING A COURSE

Policy Number: I-42

Last Reviewed: March 18, 2014

Responsible Dept.: COORDINATOR OF ENROLLMENT SERVICES

Repeating a Course

A student is limited to two enrollments in a credit course unless the course is designated as repeatable for credit or is General Usage course. General Usage courses are defined as those with the following catalog numbers:

- 90, 190, 290
- 93, 193, 293
- 95, 195, 295
- 96, 196, 296
- 97, 197, 297

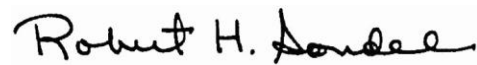
Exceptions to this policy can be made on a student-by-student basis. Students wishing to request a third attempt in a credit course must submit a *Third Repeat Request Form*. If approved, completion of the course via eLearning is prohibited unless the course is not offered in any other instructional format.

“W” and “I” grades are included when counting the number of course attempts.

Quarter credit courses completed prior to the semester system conversion in summer 1988 are not subject to this course repeat policy.

All grades earned for all courses taken are indicated on the student’s permanent record. However, only the last grade earned in a repeated course is used in cumulative grade point average (GPA) calculations and for satisfying curricular requirements.

Approved by



Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Review/Revised: 3/2014

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-40 – ACADEMIC RENEWAL

Policy Number: I-40

Last Reviewed: March 18, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

Academic Renewal

Students who return to Virginia Western after a separation of five (5) years or more may petition for academic renewal. Prior to petitioning for academic renewal, students must meet the following conditions:

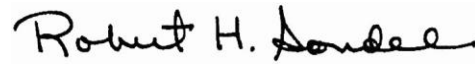
- Demonstrate renewed academic interest and effort by earning at least a 2.5 grade point average (GPA) in the first twelve (12) credit hours completed

Qualifying students must submit a *Petition for Academic Renewal* to the Records Office. If approved, all “D” and “F” grades earned prior to re-enrollment will be deleted from the cumulative and curricular grade point average (GPA). While all grades received at the college will be a part of the student’s official transcript, only courses completed with a “C” or higher prior to academic renewal can apply towards degree requirements. Additionally, total hours for graduation will be based on all coursework taken at the college after re-admission, as well as former coursework for which a grade of “C” or better was earned, and credits transferred from other colleges or universities.

If approved, the notation of Academic Renewal will be added to the student’s transcript.

Academic renewal can only be used once and cannot be revoked once approved.

Approved by



Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Review/Revised: 3/2014

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-47 – ATTENDANCE POLICY

Policy Number: I-47

Last Reviewed: September 16, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

Purpose

The faculty of the college expects each student to attend scheduled classes on a routine basis and to be punctual. Registration in a course presupposes that students will attend scheduled classes and laboratory sessions.

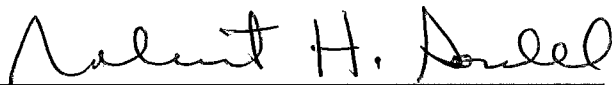
Policy

Class attendance is expected of all students at Virginia Western Community College. If a student does not attend at least one class meeting or participate in an online learning class by the “last day to drop with a tuition refund,” his/her class registration will be administratively deleted. This means that there will be no record of the class or any letter grade on the student’s transcripts. Furthermore, the student’s class load will be reduced by the course credits, and this may affect his/her full-time or part-time student status. Tuition will not be refunded.

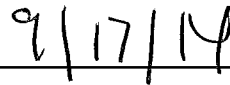
When absence from a class becomes necessary, it is the responsibility of the student to inform the instructor prior to the absence. The policy on attendance and make-up examinations is the prerogative of each instructor. Instructors will provide students with a statement of their attendance policy during the first class meeting and in the course syllabus. As a guideline, excessive absence is defined as 30 percent absence in a course. The instructor may choose to have an attendance policy that is more stringent than the 30 percent guideline. Until the last day to withdraw without grade penalty, the student who is administratively withdrawn will receive a grade of W. After that time, the student will receive the grade of F, except under documented mitigating circumstances.

Reviewed/Revised: 7/2014; 9/2014

Approved by



Robert H. Sandel, Ed.D.
President



Date

VIRGINIA WESTERN COMMUNITY COLLEGE
I – ACADEMIC & STUDENT AFFAIRS POLICIES
I-41 – COURSE PREREQUISITES

Policy Number: I-41

Last Reviewed: March 18, 2014

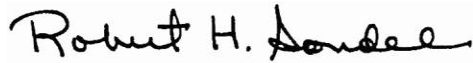
Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

Course Prerequisites

Students must comply with all individual course prerequisites established in the [College Catalog](#). It is the student's responsibility to review course prerequisites when making enrollment decisions. Students are not eligible to complete courses for which they do not meet the prerequisite. The college reserves the right to administratively remove students from any course if they do not meet the prerequisite.

Administrative overrides to course prerequisites must be approved by the department head or academic dean responsible for the course.

Approved by



Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Review/Revised: 3/2014

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-19 – STUDENT GRIEVANCE POLICY & PROCEDURES

Policy Number: I-19

Last Reviewed: June 24, 2014

Responsible Dept.: DEAN OF STUDENT SERVICES/DEAN OF ACADEMIC SCHOOLS

The purpose of the student grievance policy and procedure is to provide an equitable and orderly process to resolve grievances. A grievance is a difference or dispute between a student and a college employee regarding the following:

- Grade dispute
- Final grade appeal
- Issue with an instructor or staff member
- Issue with a class
- Issue with a college procedure

For appeals of student conduct issues, please reference the student conduct policy.

Policy

To maintain good relationships, grievances should be initiated and processed as rapidly as possible. Every effort will be made by all parties to expedite the process. Informal resolution of grievances should be pursued whenever possible.

Effect of student failure to appeal within time limit

If a decision at the first step is not appealed to the next step within the specified time limit, the grievance will be considered settled on the basis of the last decision rendered. All written grievances and appeals will include the name of the student making the grievance and a brief statement of the nature of the grievance.

Procedure

The student must bring a grievance within the time frame listed below.

Grievance	Timeline to submit written grievance on Student Grievance Form
Grade Dispute (other than final grade in course)	Within five business days of notification of grade unless otherwise indicated by instructor
Final Grade Appeal	Within one month after the grade is posted
Issue with an Instructor or Staff Member	Within one month of the incident (or within one month after the grade is posted for a course)
Issue with a Class	Within one month after the grade is posted
Issue with a College Procedure	Within one month of the incident

Step One: The student contacts the college faculty member or employee with whom the student has a difference or a dispute. Every reasonable effort should be made by all parties to resolve the matter informally at this level, and no written records of the matter will be placed in the student's official file.

Step Two: If the issue cannot be resolved at the first step, a Student Grievance Form must be submitted by the student within the time frame listed in the table above. The steps outlined on the form must be followed.

Step A: The student provides a description of the grievance in Box I.

Step B: For academic issues, the student schedules a meeting with the program head for that department. If the issue is with the program head, skip to Step C. For non-academic issues, the student schedules a meeting with the supervisor of the employee or department with whom he or she has a complaint. Following the meeting, the program head or supervisor will have the employee complete Box II. The supervisor/program head will complete Box III and notify the student of the decision.

Step C: If the student is not satisfied, he or she can schedule a meeting with the academic dean for academic issues or with the Dean of Student Services or appropriate Vice President for non-academic issues. The decision of the Vice President is final.

Step D: If the student met with a dean in Step C and is not satisfied with the outcome of the grievance, he or she may appeal to the Vice President of Academic and Student Affairs following Step Three below.

Step Three: If the student is not satisfied with the outcome of the grievance as determined by the Completion of the Student Grievance Form with either an academic dean or the Dean of Student Services then

1. The student must submit a written request for a hearing with the Vice President of Academic and Student Affairs within five business days of receipt of the decision given in Step C of the grievance process. If, based on the preponderance of evidence, the Vice President decides that the appeal and record of previous actions indicate an appeal is not warranted, the Vice President will notify the student, employee, and the dean within five calendar days after receipt of the appeal.
2. If the Vice President hears the appeal, he or she will set a date for a meeting and notify the student of the time and location in which the meeting will take place, but the meeting will take place no later than ten business days after receipt of the written appeal of the student. The Vice President will notify the student of the decision in writing within five business days after hearing the appeal.
3. A copy of the appeal and the decision of the Vice President will be placed in the student's official file, and a copy will be retained by the Vice President's office. The decision of the Vice President is final.

Final Grade Appeal Procedure

The final grade appeal procedure provides an equitable and orderly process to resolve situations in which a student may contest a final grade assigned in a course during the previous academic semester. Students should be aware that establishing course requirements and assignments, evaluating a student's work, and assigning a grade are the responsibility and the prerogative of the individual instructor. In the event that the final grade received in a course was assigned in a manner inconsistent with the course outline, or was assigned using a method other than that used to compute other students' grades in that course, the matter may be resolved through an informal or a formal procedure.

Timeline

Students are allowed to submit a grade appeal only if they do so within one month after the grade is posted.

Exception

In circumstances in which the student has mitigating documented circumstances, grade changes must be requested within one year of the receipt of the grade in question.

Informal Procedure

The student should attempt to resolve the final grade dispute with the instructor informally. If the situation is resolved informally and the instructor agrees that an error was made, the instructor will submit a Grade Change Form to the appropriate academic dean, who will forward it to the Records Office.

Formal Procedure

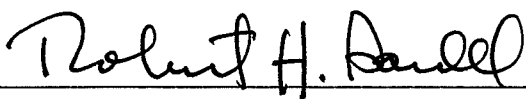
If final grade conflicts cannot be resolved informally as described above, students must adhere to the following:

1. It is the responsibility of the student to notify the Program Head within five business days of the instructor's decision to deny a grade change through the informal process using the Student Grievance Form.
2. There are two grounds for formal grade appeal:
 - a. The assignment of a grade in a manner other than as described on the course outline or amended by the instructor without appropriate notice;
 - b. The assignment of a grade using a method other than that used for the other students in the class.
3. The Program Head will follow the Student Grievance Process using the Student Grievance Form. Course syllabi and evaluation materials will be included in the review of the disputed grade.
4. Following the Student Grievance Procedure, if the student is not satisfied with the Program Head's decision, the student may follow the process outlined on the Student Grievance Form to appeal the decision to the academic dean and the Vice President of Academic & Student Affairs if necessary. The decision of the Vice President of Academic & Student Affairs is final.
5. If at any time it is determined that a grade change is warranted, a grade change form will be submitted to the Records Office.

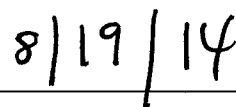
If a student has exhausted all available grievance procedures established by Virginia Western Community College and did not receive a satisfactory resolution, he/she may contact SCHEV as a last resort in the grievance process
<http://www.schev.edu/students/studentcomplaintprocess.asp>

Review/Revised: December 2012; June 2014

Approved by



Robert H. Sandel, Ed.D.
President



Date

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-21 – STUDENT CONDUCT

Policy Number: I-21

Last Reviewed: May 13, 2014

Responsible Dept.: DEAN OF STUDENT SERVICES

Student Rights and Responsibilities

Virginia Western Community College holds certain expectations of students to share the responsibility of maintaining a safe, secure, and honest academic environment.

By applying for admission to the College, each student agrees to abide by the policies and procedures governing student conduct. The statement below outlines the rights each student has as a member of the college community as well as the responsibilities each student has to continue within that community.

Each student has the privilege of exercising his or her rights without fear of prejudice provided he/she respects the laws of the Commonwealth, the policies of Virginia Western and the rights of others on campus. Such rights include the following:

- Students are free to pursue their educational goals. Appropriate opportunities for learning in the classroom and on campus are provided through the curricula offered by the college.
- No disciplinary sanctions may be imposed without due process, except as provided in the Student Conduct Policy below.
- Students have the right to freedom of expression, inquiry, and assembly provided actions do not interfere with the rights of others or the effective operation of the college.
- Academic evaluation of student performance shall be fair, not arbitrary or inconsistent.
- Members of the college community, including students, have the right to expect safety, protection of property, and the continuity of the educational process.

Each student, as a responsible adult, shall maintain standards of conduct appropriate to membership in the college community. Such responsibilities include the following:

- Each student has the responsibility to demonstrate respect for his or herself as well as faculty, staff and other students.
- Each student has the responsibility to know, understand, and abide by the regulations and policies of the college.
- Each student has the responsibility to pay all fines and debts to the college.
- Each student has the responsibility to maintain academic integrity and abide by the academic honesty policy of the college.

Student Conduct

Disorderly conduct threatens a productive academic environment and will not be tolerated. Disciplinary action by the College shall be limited to conduct that adversely affects the college community's pursuit of its educational objectives.

Misconduct

Violations of the following list of conduct violations, which is not all-inclusive, are subject to disciplinary action.

1. **Threat to Health or Safety:** When the student's continued presence at the college is deemed to constitute a threat to the health, safety or welfare of members of the campus community.
2. **Bomb Threat, Fire Alarm, Hoax:** When the student activates a fire or lockdown alarm without cause, or makes a threat to bomb or damage college property, students, faculty, staff, or visitors; or undertakes a hoax involving use of a supposedly destructive device or substance; or encourages, incites, or solicits any person to commit such a threat or such an act.
3. **Weapons:** When the student possesses, on his or her person, or uses weapons, to include guns, knives, or other dangerous objects. No weapons are permitted on campus.
4. **Theft:** When the student engages in theft, larceny, embezzlement, or the temporary taking of the property of another without consent.
5. **Riot:** When the student incites or engages in a riot or a disorderly assembly.
6. **Drugs:** When the student engages in the possession, use, sale or manufacture of illegal or controlled substances.
7. **Forgery:** When the student forges, alters, or misuses college documents or records, to include student identification cards, or tampers with student registration data.
8. **Computer Security:** When the student makes unauthorized use of computer resources, or makes unauthorized efforts to penetrate or modify any computing hardware or software.
9. **Disruption:** Disruption of a classroom, laboratory, library, office, hallway, public student space, such as the student center, meeting or hearing.
10. **Failure to Comply:** Failure to comply with a college official appropriately acting in the performance of his or her duties.
11. **Verbal Abuse:** When the student utters obscene words or engages in verbal abuse that constitutes harassment of others.
12. **Assault, Battery, Fighting:** When the student engages in assault, battery, or fighting.
13. **Harassment:** When the student engages in psychological abuse, racial, sexual or other harassment.
14. **Property Destruction:** When the student destroys, damages, defaces, or misuses public or private property.
15. **Illegal Entry:** When the student illegally enters or occupies state property.

- 16. Gambling:** When the student engages in unlawful gambling or gaming.
- 17. Alcoholic Beverages:** When the student possesses or consumes alcoholic beverages or is legally intoxicated.
- 18. Criminal Charges:** When the student is formally charged with the commission of a crime.
- 19. Misuse of Federal Funds:** When the student uses federal funds for someone other than him/herself or uses funds in a way that does not support his/her own educational endeavors.
- 20. Electronic Bullying:** When a student uses Facebook, or any other type of social media, to intimidate or bully a student, faculty or staff member.
- 21. Impersonation or Assuming a False Identity:** When a student impersonates a college employee or falsely identifies him/herself.

Policy Procedure and Sanctions

Any staff, administrative official, faculty member, or student may file a written complaint against any student for misconduct by using the *Report of Student Misconduct Form*. When a member of the Care/Threat Team believes that the continued presence of a person charged with misconduct presents a serious and immediate danger to the college community, the student may be suspended pending consideration of the case. Such suspension shall not exceed a reasonable time, as determined by the Dean of Student Services. The *Report of Student Misconduct Form* shall be filed with the Dean of Student Services.

Investigation

The Dean of Student Services (or designee) will initiate an investigation into the charges. The accused student will be contacted via student email to schedule a meeting time to discuss the alleged violation. The discussion would include the nature and sources of the charges and the student's rights and responsibilities. As part of the review, the Dean of Student Services (or designee) will determine if the nature of the allegations justifies a sanction that affects the student's right to an education. If so, the alleged violations will be referred to the Student Conduct Committee. If the nature of the allegations does not justify sanctions that would affect the student's right to an education, the Dean has the options of imposing a disciplinary sanction, referring the matter to the Student Conduct Committee or dismissing the charges as unfounded. Unless the student has been suspended or dismissed via the Care/Threat Assessment team, the student may continue with classes during the investigation and/or student conduct committee procedures. The student will be notified of the decision in writing, via student email within ten business days of the initial meeting between the Dean and the student. A record of this decision will be forwarded to the Vice President of Academic and Student Affairs.

Disciplinary Sanctions

Administrative actions available to the Dean of Student Services are as follows:

- Reprimand or admonition
- Restitution for damages
- Suspension from college extracurricular activities

Appeals Procedure (Dean's Adjudication)

A decision of the Dean of Student Services (or designee) may be appealed to the Vice President of Academic and Student Affairs. The *Vice President Appeal – Dean's Adjudication Form* must be completed and be received by the Vice President's office within five business days after the decision of the Dean. The

Vice President will review the written record and reach a determination. The decision of the Vice President of Academic and Student Affairs is final.

Student Conduct Committee Procedure

Charges that have not been dismissed or have not received a sanction from the Dean of Student Services (or designee) will be referred to the Student Conduct Committee. The Student Conduct Committee procedure, outlined at the end of this section, will then be followed. If there are pending criminal charges associated with the misconduct charge, the Student Conduct Committee procedure may begin after the criminal charges are resolved.

Disciplinary Sanctions

Disciplinary sanctions available to the Student Conduct Committee are listed below.

- Warning: Notice, in writing, that continuation or repetition of conduct found wrongful, within a period of time stated in the warning, may cause more severe disciplinary action;
- Disciplinary Probation: Suspension of eligibility for college extracurricular activities;
- Suspension: Exclusion from classes and other privileges or activities as set forth in the notice for a definite period of time not to exceed two years;
- Expulsion: Termination of student status for an indefinite period. The conditions of readmission, if any, shall be stated in the order of expulsion; or
- Return the student to former status.

All decisions of the Student Conduct Committee will be reviewed by the Dean of Student Services (or designee) prior to submission of the final report of the Committee. If there is a need to revisit the sanctions imposed, the Committee Chair will ask for a voice vote by e-mail notification within five business days of the review of the Dean. The Dean of Student Services (or designee) will contact the student in writing via Virginia Western email with the decision of the Student Conduct Committee.

Appeals Procedure (Conduct Committee)

A decision of the Student Conduct Committee on student misconduct may be appealed to the Vice President of Academic and Student Affairs. The *Vice President Appeal – Student Conduct Committee Form* must be completed and be received by the Vice President's office within five business days after notification of the Student Conduct Committee's decision from the Dean of Student Services (or designee). The Vice President will review the written record and reach a determination. The decision of the Vice President of Academic and Student Affairs is final.

Academic Misconduct

Violations of the following list of academic misconduct actions, which is not all-inclusive, are subject to disciplinary action.

1. Cheating on an examination or quiz — either giving or receiving information
2. Copying information from another person for graded assignments
3. Possessing unauthorized materials during tests
4. Collaboration during examinations
5. Buying, selling, providing or stealing papers, examinations, or other work to be submitted for a class
6. Substituting for another person, or arranging such a substitution for yourself
7. Plagiarism—the intentional or accidental presentation of another’s words or ideas as your own. Students should familiarize themselves with the description of plagiarism found in their English handbooks, their English class syllabi, or in writing manuals available in the library. **Ignorance of what constitutes plagiarism is not a defense for such a serious infraction.**
8. Submission of work other than one’s own for written assignments
9. Collusion with another person or persons in submitting work for credit in class or lab, unless such collaboration is approved in advance by the instructor
10. Falsifying documentation
11. Multiple Submissions—It is a violation of academic honesty to submit substantial portions of the same work for credit more than once without the explicit consent of the instructor to whom the material is being submitted

Policy, Procedure, and Sanctions

Faculty members who have evidence of academic misconduct will

1. Investigate the matter.
2. Review the facts of the matter and the proposed penalty with the appropriate academic dean.
3. Faculty may then take one or more of the following actions (this information should be included on your syllabus):
 - a. Require the work to be accomplished again
 - b. Award a grade of zero (0) for the test, paper or exercise
 - c. Assign a grade of F for the course
4. Send via Virginia Western email or hand deliver a copy of the *Academic Misconduct Notification Letter* including charges and sanctions, and inform the student of the appeal process.
5. Complete a *Report of Academic Misconduct Form* within seven business days of becoming aware of the misconduct. A copy of this report and a copy of the *Academic Misconduct Notification Letter* should be forwarded to the office of the Dean of Student Services and the incident of academic misconduct is recorded on the log of incidents kept by the Dean of Student Services (or designee). This information becomes a part of the students’ educational record but is not included on academic transcripts.

First Incident of Academic Misconduct

If this is the first incident of academic misconduct, the instructor's sanction will be the only penalty. The incident will be recorded on the log kept by the office of Dean of Student Services and the hard copy will remain on file in the office of the Dean of Student Services for five years. The report will be destroyed at the end of the five-year period. Electronic copies and log are housed and kept indefinitely.

Exceptions include:

- (1) In the case of a restricted enrollment program, if a signed agreement for entry into the program has specific clauses about the penalties for academic misconduct or the penalties are defined in the program's student handbook, those will be followed in addition to or instead of the instructor's sanction.
- (2) In cases of falsified documentation, the case will be referred directly to the Dean of Student Services (or designee) for a conduct committee hearing.

Unless the committee returns the student to former status, the report will become a part of the student's educational record at Virginia Western Community College.

Appeals process for first incident of Academic Misconduct

If a student wishes to appeal a first incident of academic misconduct made by a faculty member, he/she must complete the *Appeal of First Incident of Academic Misconduct Form*. The form should be submitted to the office of Dean of Student Services within five business days of being notified of the charge by the faculty member. Students may still attend class while making an appeal of academic misconduct to the student conduct committee. A Student Conduct Committee hearing will be held to hear the appeal.

Possible sanctions include:

- Support the penalty imposed by the faculty member
- Award a grade of zero (0) for the test, paper or exercise
- Assign a grade of F for the course
- Require the work to be accomplished again
- Return the student to former status.

All decisions of the Student Conduct Committee will be reviewed by the Dean of Student Services (or designee) prior to notifying the student of the decision. If there is a need to revisit the sanctions imposed, the Committee Chair will ask for a voice vote by e-mail notification within five business days of the review of the Dean. The Dean of Student Services (or designee) will contact the student in writing via Virginia Western email account with the decision of the Student Conduct Committee.

Second Incident of Academic Misconduct

In the case of a second incident of academic misconduct, defined by two reports being filed in the office of the Dean of Student Services, the Dean of Student Services (or designee) will refer the case to the Student Conduct Committee to be heard. The committee may take one of the following actions.

- Support the penalty imposed by the faculty member
- Award a grade of zero (0) for the test, paper or exercise
- Assign a grade of F for the course
- Require the work to be accomplished again
- Suspension from the college
- Expulsion
- Return the student to former status

Unless the committee returns the student to former status, the report will become a part of the student's educational record at Virginia Western Community College.

All decisions of the Student Conduct Committee will be reviewed by the Dean of Student Services (or designee) prior to notifying the student of the decision. If there is a need to revisit the sanctions imposed, the Committee Chair will ask for a voice vote by e-mail notification within five business days of the review of the Dean. The Dean of Student Services (or designee) will contact the student in writing via Virginia Western email account with the decision of the Student Conduct Committee.

Third Incident of Academic Misconduct

In the case of a third incident of academic misconduct, defined by three reports being filed in the office of the Dean of Student Services, the case will be referred to the Dean of Student Services (or designee) to be heard by the Student Conduct Committee. The decision of the committee will become part of the student's educational record. The committee may take one of the following actions:

- Suspension
- Expulsion
- Return the student to former status

Unless the committee returns the student to former status, the report will become a part of the student's educational record at Virginia Western Community College.

All decisions of the Student Conduct Committee will be reviewed by the Dean of Student Services (or designee) prior to notifying the student of the decision. If there is a need to revisit the sanctions imposed, the Committee Chair will ask for a voice vote by e-mail notification within five business days of the review of the Dean. The Dean of Student Services (or designee) will contact the student in writing via Virginia Western email account with the decision of the Student Conduct Committee.

In the case of a second or third offense, all appeals for previous offenses must be completed before hearings are held on those charges.

Appeals Process for Care/Threat Assessment Team Dismissal

If a student wishes to appeal a Care/Threat Assessment Team dismissal, he/she must submit the Care/Threat Assessment Team Dismissal Appeal Form to the Dean of Student Services (or designee) within ten business days of notification of dismissal. A Student Conduct Committee hearing will be held using the procedures below. Sanctions include:

- Support dismissal of Care/Threat Assessment Team
- Return student to former status

The decision of the Student Conduct Committee is final; there are no further appeals in a Care/Threat Assessment Team dismissal. A student may not attend classes if dismissed by the Care/Threat Team even if appealing if the decision. For additional information on the Care/Threat Assessment Team, please see the Campus and Workplace Violence Prevention Policy.

Three or More Incidents of Misconduct

If a student receives a total of three or more misconduct reports (academic, student or a combination of both) then the student will automatically be referred to the Student Conduct committee. Disciplinary sanctions available to the Student Conduct Committee are listed below:

- Suspension: Exclusion from classes and other privileges or activities as set forth in the notice for a definite period of time not to exceed two years;
- Expulsion: Termination of student status for an indefinite period. The conditions of readmission, if any, shall be stated in the order of expulsion.

Student Conduct Committee Procedure

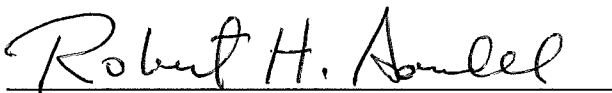
The Student Conduct Committee will be convened for student misconduct and academic misconduct allegations on the recommendation of the Dean of Student Services (or designee). The following procedure will be followed:

1. Within five business days of the recommendation of a hearing by the Dean of Student Services (or designee), the student will be sent written notification of the charges and student rights. The written notification will be sent to the student's Virginia Western email account.
2. From the date the notification is emailed to the student's Virginia Western email address, the student will have ten calendar days to respond to the charges.
3. A date for the hearing will be scheduled and reported in writing to the student within five business days of receipt of the student's response or the end of the period given for the student to respond. The hearing date will be no fewer than ten and no more than thirty calendar days from the date the hearing notification is emailed. This period may be extended under reasonable circumstances at the discretion of the Dean of Student Services (or designee).
4. The hearing will be held whether or not the student responds and/or is present.
5. If the student is unable to make the hearing date for good cause, he/she should contact the Chair of the Student Conduct committee within five business days of receiving the hearing notification to reschedule the hearing.
6. The Student Conduct Committee will consist of a quorum of five or more members, including the chairperson, elected or appointed at the beginning of the academic year. Substitutions for members who are unavailable may be made by the Student Conduct Committee Chair.
7. The accused student has the right to be advised by counsel or an advisor who may come from within or outside the institution. Counsel may be present at the hearing and may advise the student during the hearing, but will not be allowed to address the committee.
8. The hearing will begin no later than five minutes after the appointed time, with or without the student and his or her counsel present, as long as a quorum of college representatives is present.
9. A transcript will be kept of the proceedings. Written transcripts will be retained in the Office of the Dean of Student Services for five years. Electronic copies and the conduct log are stored indefinitely.
10. The following format will be followed:
 - a. The committee chair will state the purpose.
 - b. All persons present will introduce themselves.
 - c. The committee chair will present the charges.
 - d. The committee chair will present possible sanctions.
 - e. The committee chair will ask involved members of the college to speak.
 - f. The student may ask questions of speakers after all have presented their case.
 - g. The committee may ask questions of the speakers.
 - h. The student will be asked to speak.
 - i. The committee may ask questions of the student or college representatives.
 - j. All parties except the Student Conduct Committee will be excused, so the committee can discuss the case in private.
 - k. A vote will be taken of Student Conduct Committee members. The chair is a voting member. A decision will be made by a simple majority vote.
 - l. Written recommendation will be made by the Student Conduct Committee to the Dean of Student Services.

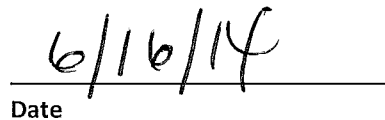
- m. Within five business days of receipt of the committee's recommendation, the Dean of Student Services (or designee) shall act on the recommendations and provide written notification via Virginia Western student email to the student and the Student Conduct Committee of the decision.
11. Appeals of the Student Conduct Committee findings on misconduct or academic issues may be appealed to the Vice President of Academic and Student Affairs. The Vice President Appeal – Student Conduct Committee Form must be completed and be received by the Vice President's office within five business days after the student is notified of the committee's decision. The Vice President will review the written record and reach a determination.
12. The decision of the Vice President of Academic Affairs is final. There are no further appeals in student misconduct or academic misconduct cases.
13. The student will be allowed to continue with the class until the decision is finalized. However, if no decision is made by the end of the academic semester, an interim grade of "I" (Incomplete) will be issued. Once a student conduct committee decision is made and the student is suspended, dismissed, expelled or fails the course then the student is not allowed to continue to attend class unless appealing to the Vice President of Academic and Student Affairs. If the Vice President overturns the decision then the student may return to former status.

Updated December 2012
February 2013
May 2014

Approved by



Robert H. Sandel, Ed.D.
President



Date

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-18 – GRADING POLICY

Policy Number: I-18

Last Reviewed: July 8, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

The quality of performance in any academic course is reported by a letter grade, the assignment of which is the responsibility of the instructor. These grades denote the character of study and are assigned quality points as follows:

- A Excellent: 4 grade points per credit
- B Good: 3 grade points per credit
- C Average: 2 grade points per credit
- D Poor: 1 grade point per credit
- F Failure: 0 grade points per credit

Other grades may be assigned to include **I** Incomplete; **P** Pass; **S** Satisfactory; **R** Re-enroll; **U** Unsatisfactory; **W** Withdrawal and **X** audit. These grades are not included in the calculation of grade point averages. Courses graded with an S, R, U, or X will not result in the award of credits.

Faculty have the prerogative to establish how each letter grade is determined in their courses. The grading requirements, including grading scale, must be documented in the course syllabus. Virginia Western does not have a college-wide grading scale, but leaves this to the discretion of the teaching faculty.

Once a grade is awarded, it is normally permanent. In situations where there are documented, mitigating circumstances or an uncontested error, grade changes must be requested within one year of receipt of the grade in question. For contested grades, students are allowed to submit a grade appeal only if they do so within one month after the grade is posted. Information regarding final grade appeals are found in the [Student Grievance Policy](#). Virginia Western's grade plan is reviewed annually under the supervision of the College Registrar and the Vice President of Academic and Student Affairs.

18.1 No Show Policy

In order to receive any letter grade, a student must have attended a minimum of one class meeting or the equivalent in the case of a distance learning course. In a distance learning course, initial student attendance is determined by course participation as measured by accessing and using course materials, completion of a class assignment, participation in a course discussion, or other evidence of participation.

Students who enroll in a course but do not attend a minimum of one class meeting or the distance learning equivalent by the census date will be administratively deleted from the course. In this case, there will be no tuition refund for the course. Students who are dropped from a course by the instructor for non-attendance cannot be reinstated unless instructor error is determined.

18.2 Withdrawal Policy

A grade of "W" is awarded to students who withdraw or are withdrawn from a course after the drop period, but prior to the completion of 60% of the session. Students who cease attendance prior to the withdrawal deadline may be withdrawn from the class. Students who are withdrawn by the instructor for non-participation cannot be reinstated unless instructor error is determined.

After the completion of 60% of the session, a student who withdraws or is withdrawn from a course will be assigned a grade of "F". Exceptions to this policy may be made under mitigating circumstances. Such circumstances must be documented and a copy of the documentation must be placed in the student's academic file. In order to be eligible for an administrative withdrawal, the student must have been making satisfactory progress in the course at the time of withdrawal.

Students seeking exceptions to this withdrawal policy must submit an *Administrative Withdrawal Form* and a copy of the documentation of the mitigating circumstance to the Admissions Office Manager.

18.3 Incomplete Grade Policy

The grade "I" is to be used only for verifiable, unavoidable reasons that a student is unable to complete a course within the normal course time. To be eligible to receive an "I", the student must (1) have satisfactorily completed more than 50% and (2) must request the faculty member assign the "I" grade and indicate why it is warranted. The faculty member has the discretion to decide whether the "I" grade will be awarded. Since the "incomplete" extends the enrollment in the course, requirements for satisfactory completion shall be established through consultation between the faculty member and the student.

In assigning the "I" grade, the faculty member must submit an *Incomplete Grade Contract* that (1) states the reason for assigning the grade; (2) specifies the work to be completed and indicates its percentage in relation to the total work of the course; (3) specifies the date by which work must be completed and (4) identifies the default grade (B, C, D, F, P, R, or U) based upon the coursework already completed. Completion dates may not be set beyond the subsequent semester (to include summer term).

If the work is not completed in accordance with the dates outlined in the *Incomplete Grade Contract*, the student will be awarded the default grade. The default grade will be final. At the end of each term, all outstanding "I" grades will be changed to the default grade prior to final grade processing.

18.4 Audit Policy

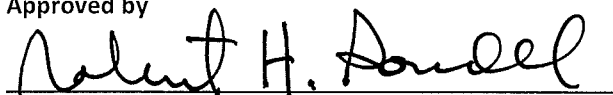
Students desiring to attend a course without taking the examination or receiving credit for the course may do so by registering to audit through the usual registration process and paying the normal tuition. Permission of the academic dean or the College Registrar on the *Audit Approval Form* is required to audit a course.

Audited courses carry no credit and do not count as a part of the student's course load. Students desiring to change status in a course from audit to credit or from credit to audit must do so within the add/drop period for the course.

Students who desire to earn credit for a previously audited course must re-enroll in the course for credit and pay normal tuition to earn a grade other than an "X". Advanced standing credit cannot be awarded for previously audited courses.

Review/Revised: 12/2012; 1/2014; 7/2014

Approved by



Robert H. Sandel, Ed.D.

President

8/19/14

Date

EXAM SCHEDULES 2014-2015

Fall 2014 and Spring 2015

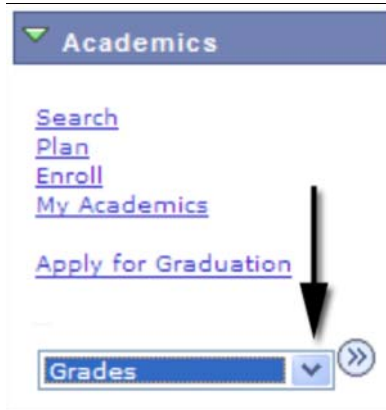
Fall 2014 Time	Monday Dec. 15	Tuesday Dec. 16	Wednesday Dec. 17	BEGINS Thursday Dec. 11	Friday Dec. 12
Spring 2015 Time	BEGINS Monday May 4	Tuesday May 5	Wednesday May 6	Thursday May 7	Friday May 8
8:00 M W F	8:00-10:30 a.m.				
9:00 M W F 9:00 M W			9:00-11:30 a.m.		
10:00 M W F 10:00 M W					10:00-12:30 a.m.
11:00 M W F 11:00 M W	11:00-1:30 p.m.				
12:00 M W F 12:00 M W			12:00-2:30 p.m.		
1:00 M W F 1:00 M W 1:30 M W					1:00-3:30 p.m.
2:00 M W F 2:00 M W 2:30 M W	2:00-4:30 p.m.				
3:00 M W F 3:30 M W			3:00-5:30 p.m.		
8:00 T Th 8:30 T Th				8:00-10:30 a.m.	
9:00 T Th 9:30 T Th		9:30-12:00 p.m.			
10:30 T Th 11:00 T Th				11:00-1:30 p.m.	
12:00 T Th 12:30 T Th 1:00 T Th		12:30-3:00 p.m.			
2:00 T Th 2:30 T Th				2:00-4:30 p.m.	
3:30 T Th		3:30-6:00 p.m.			

Evening Classes: All classes meeting at 4 p.m. or after will take exams during exam week at regularly scheduled class hours.

Saturday Classes: Saturday classes will take exams on the last scheduled class meeting.

VIEW YOUR GRADES

1. Sign into **MyVWCC** by clicking on the [Login to MyVWCC \(http://vw.my.vccs.edu\)](http://vw.my.vccs.edu) link on the left of this screen or the [MyVW](#) on the VWCC homepage.
2. Click **VCCS SIS: Student Information System**.
3. Click **Student Center**.
4. In the **Academics** section, click on the drop-down menu and select **Grades**.



5. Click the blue >> button.
 6. If necessary, click **Change Term**, then **select the term** from the **Select Term** menu and click **CONTINUE**.
 7. Your term statistics will be displayed below your grades.
 8. To exit, click **Sign Out**.
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VIRGINIA WESTERN COMMUNITY COLLEGE
I – ACADEMIC & STUDENT AFFAIRS POLICIES
I-38 – ACADEMIC HONORS

Policy Number: I-38

Last Reviewed: March 18, 2014

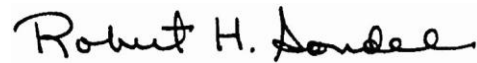
Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

Academic Honors

Both curricular and non-curricular students are eligible for academic honors at Virginia Western. These honors are awarded at the end of each semester to students who are enrolled in at least 12 non-developmental credits. The Dean's List recognizes students who earn a semester grade point average between 3.2 and 3.4. The President's Honor Roll recognizes students who earn a semester grade point average of 3.5 or higher. Only the highest applicable honor will be awarded. Academic honors are noted on the student's official transcript.

Virginia Western also awards graduation honors. Information about these distinctions can be found in the [*Graduation Requirements Policy*](#).

Approved by



Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Review/Revised: 11/2013; 3/2014

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-31 – ACADEMIC STANDING

Policy Number: I-31

Last Reviewed: January 14, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

Academic Standing

Students are considered to be in “good academic standing” if they maintain a semester minimum grade point of average (GPA) of 2.00, are eligible to re-enroll at Virginia Western, and are not on academic suspension or dismissal status.

31.1 Academic Warning

Students who fail to attain a minimum GPA of 2.00 for any semester shall be placed on academic warning. Students on academic warning should be encouraged to consult with their advisor and take advantage of the academic support services provided by the college.

31.2 Academic Probation

Students who fail to maintain a cumulative GPA of 1.50 shall be on academic probation until such time as their cumulative grade point 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 Student Services, the Coordinator of Enrollment Services, or the College Registrar.

Students will be required to carry a less than normal load the following semester and are required to consult with an advisor. Students on academic probation may not enroll in more than 9 credits during the fall or spring semester. During the summer semester, students on academic probation are limited to 6 credit hours of enrollment. Students on academic probation are ineligible to enroll in distance learning or hybrid courses.

Students shall be placed on academic probation only after they have attempted 12 semester credits.

31.3 Academic Suspension

Students on academic probation who fail to attain a semester GPA of 1.50 or better shall be placed on suspension only after they have attempted 24 semester credits. Academic suspension shall be for one semester. The statement “Academic Suspension” shall be placed on the 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 completing a *Petition for Admission/Reinstatement*. Additional action may be required by the student base on a review

of the *Petition for Admission/Reinstatement*. The requirements may include, but are not limited to, the completion of placement testing. The *Petition for Admission/Reinstatement* as well as any additional requirements for enrollment must be completed prior to the begin date of the desired term of re-entry.

Exceptions to the one semester waiting period may be made on a case-by-case basis by the Dean of Student Services or the Coordinator of Enrollment Services.

Students who have been reinstated from academic suspension must achieve a 2.00 GPA for the semester of their reinstatement and must earn at least a 1.75 GPA in each subsequent semester of attendance. The statement "Subject to Dismissal" shall be placed on the student's permanent records. Students who have been reinstated from academic suspension will remain subject to dismissal until their cumulative GPA is raised to a minimum of 1.75. Reinstated students will be required to carry less than a normal course load the following semester and are required to consult with an advisor.

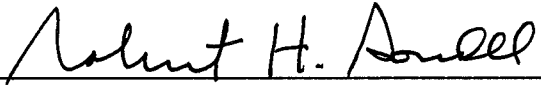
31.4 **Academic Dismissal**

Students who do not attain at least a 2.00 GPA for the semester of reinstatement following academic suspension shall be academically dismissed. Students who achieve at least a 2.00 GPA for the semester of their reinstatement following academic suspension 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 a 1.75 shall result in academic dismissal. The statement "Academic Dismissal" shall be placed on the students' permanent records. Academic dismissal is normally permanent. In exceptional circumstances, students may appeal and be reinstated by completing the *Petition for Admission/Reinstatement* after a three year waiting period.

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 will be required to carry less than a normal course load the following semester and are required to consult with an advisor.

Review/Revised: 1/2014

Approved by



Robert H. Sandel, Ed.D.
President

2/3/14

Date

VIRGINIA WESTERN :: STUDENT SERVICES :: TRANSFER ADVISING

TRANSFER ADVISING

Academic advisors in Chapman Hall are available to help students choose the most appropriate program for their long-term goals. Most four-year colleges and universities in Virginia strongly encourage community college students to **complete** their degree before trans

Associate of Arts (AA) and Associate of Science (AS) degree programs are specifically designed for students who want to transfer to a four-year college or university. VWCC offers programs in Business Administration, Computer Science, Engineering, Fine Arts, General Studies, Health Sciences, Liberal Arts, Science and Social Science.

Associate in Applied Science (AAS) degree programs are primarily designed for students who want to enter directly into the job market. However, some of these programs can also be used to prepare a student to transfer to a four-year college or university.

Old Dominion University maintains an office in Webber Hall on the Virginia Western Community College campus and Radford University maintains an office at the Roanoke Higher Education Center. Both of these institutions offer bachelor's degree programs students can complete without leaving Roanoke.

TRANSFER GUIDES

Many four-year colleges in Virginia post transfer guides which detail how various courses within the Virginia Community College System transfer to their institutions. This valuable information allows students to make appropriate course selections based on their intended destination and major. If you are intending to transfer, it is recommended that you check these guides often and verify the accuracy of information with your four-year college.

- [Christopher Newport University \(http://cnu.edu/admission/transreadmit/transfer/vccs.asp\)](http://cnu.edu/admission/transreadmit/transfer/vccs.asp)
 - [Ferrum College \(http://www.ferrum.edu/admissions/prospective_students/apply/transfer/transferring_credits/equivalent\)](http://www.ferrum.edu/admissions/prospective_students/apply/transfer/transferring_credits/equivalent)
 - [Hollins University \(http://www.hollins.edu/admissions/pdfs/transfer_guide.pdf\)](http://www.hollins.edu/admissions/pdfs/transfer_guide.pdf)
 - [James Madison University \(http://www.jmu.edu/transfer/VCCSTransfer/index.shtml\)](http://www.jmu.edu/transfer/VCCSTransfer/index.shtml)
 - [Liberty University \(http://www.liberty.edu/index.cfm?PID=10713\)](http://www.liberty.edu/index.cfm?PID=10713)
 - [Longwood University \(http://www.longwood.edu/admissions/16657.htm\)](http://www.longwood.edu/admissions/16657.htm)
 - [Lynchburg College \(http://www.lynchburg.edu/undergraduate-admission/transfer-credit-guide\)](http://www.lynchburg.edu/undergraduate-admission/transfer-credit-guide)
 - [Old Dominion University](#)
 - [Radford University \(http://www.radford.edu/content/dam/departments/administrative/registrar/content-files/Transfer-Guide.pdf\)](http://www.radford.edu/content/dam/departments/administrative/registrar/content-files/Transfer-Guide.pdf)
 - [Roanoke College \(http://www.roanoke.edu/transfer/VA_CC_Xfer_Guide.htm\)](http://www.roanoke.edu/transfer/VA_CC_Xfer_Guide.htm)
 - [University of Virginia \(http://es-sazwebdmz.eservices.virginia.edu/asequivs/Main1/GetEquivsGivenSchool?schoolDropDownList=Virginia+Western+Cmty+College\)](http://es-sazwebdmz.eservices.virginia.edu/asequivs/Main1/GetEquivsGivenSchool?schoolDropDownList=Virginia+Western+Cmty+College)
 - [Virginia Commonwealth University \(http://www.transferguide.vcu.edu/counselors/default.aspx\)](http://www.transferguide.vcu.edu/counselors/default.aspx)
 - [Virginia Tech \(http://www.tranguide.registrar.vt.edu/\)](http://www.tranguide.registrar.vt.edu/)
 - [The College of William and Mary](#)
-

GUARANTEED ADMISSIONS AGREEMENTS

The Virginia Community College System has entered into guaranteed admissions agreements (GAA) with many of the four-year colleges and universities within the state. A GAA is an agreement that guarantees a Virginia Western student will be accepted to a specific four-year school when the student meets the requirements outlined in the GAA. The link below provides a current listing of the guaranteed admissions agreements that Virginia Western honors as a member of the Virginia Community College System.

[Guaranteed Admissions Agreements \(http://www.vccs.edu/students/transfers/\)](http://www.vccs.edu/students/transfers/) (click here for a current listing of agreements)

In addition to the agreements listed in the above link, Virginia Western has entered into various GAA's independent of the Virginia Community College System (links for these agreements are located below).

ARTICULATION AGREEMENTS

Virginia Western Community College has also entered into numerous articulation agreements with four-year schools in Virginia. An articulation agreement is an agreement that informs students as to what classes to take at Virginia Western in order to transfer them to a specific four-year school. However, completion of an Articulation Agreement alone does not guarantee admission to the four-year school.

HIGH SCHOOL/DUAL ENROLLMENT STUDENTS

It is important to note that students completing coursework through high school dual enrollment may need to take additional courses not necessarily required for their degree in order to satisfy a guaranteed admissions agreement. In addition, any high school student who completes an Associate's Degree while in high school may not be eligible for a guaranteed admissions agreement. High school students who enroll in college courses should carefully read the stipulations of each agreement and contact the four-year school with any questions concerning eligibility.

AGREEMENTS (INDEPENDENT OF VCCS)

Below is a list of articulation agreements and guaranteed admissions agreements that Virginia Western has entered into independent of the Virginia Community College System.

(All documents are in pdf format unless otherwise noted.)

BLUEFIELD STATE COLLEGE

- [AAS in Accounting to BS in Business Admin.](#) (Articulation)
- [AAS in Management - HRM Specialization to BS in Business Admin.](#) (Articulation)
- [AAS in Management to BS in Business Admin.](#) (Articulation)
- [AS in Business Admin. to BS in Business Admin.](#) (Articulation)
- [AAS in Management - Marketing Spec. to BS in Business Admin.](#) (Articulation)

FERRUM COLLEGE

- [Criminal Justice Program](#) (Articulation)

JEFFERSON COLLEGE OF HEALTH SCIENCES

- [BS in Healthcare Management](#) (Articulation)
- [BS in Health Psychology](#) (Articulation)
- [BS in Health and Exercise Science](#) (Articulation)
- [BS in Nursing](#) (Articulation)
- [BS in Respiratory Therapy](#) (Articulation)

JAMES MADISON UNIVERSITY

- [AA/AS](#) (Guaranteed Admissions Agreement)

OLD DOMINION UNIVERSITY

- [Criminal Justice](#) (Articulation)
- [Civil Engineering Technology](#) (Articulation)
- [Dental Hygiene to BS in Health Sciences](#) (Articulation)

- [BS in Dental Hygiene](#) (Articulation)
- [Electrical Engineering](#) (Articulation)
- [Human Services](#) (Articulation)
- [Mechanical Engineering](#) (Articulation)
- [Radiography to Health Sciences](#) (Articulation)
- [RN to Health Sciences](#) (Articulation)
- [RN to BS in Nursing](#) (Articulation)

PURDUE UNIVERSITY

- [AAS to BS in Mechatronics](#) (Articulation)

RADFORD UNIVERSITY

- [BS in Social Work](#) (Articulation)

ROANOKE COLLEGE

- [Articulation Agreement](#)
-

PROGRAMS OF STUDY

At VWCC, you may choose from a variety of associate degree and certificate programs to meet your educational and career goals. Many of our courses are available through different modalities including dual enrollment, eLearning, and Honors courses. In addition to these courses and programs, VWCC offers noncredit workforce classes and certificates.

- [Areas of Study A to Z](#)
- [Associate of Arts \(AA\) Degrees](#)
- [Associate of Science \(AS\) Degrees](#)
- [Associate of Applied Science \(AAS\) Degrees](#)
- [Certificates](#)
- [Career Studies Certificates](#)
- [eLearning](#)
- [Dual Enrollment](#)
- [Workforce Development](#)

DEFINITIONS

Degree - An award at the associate level that represents completion of the requirements of a degree program.

Major - A collection of courses that are necessary to meet the requirements of the degree program under which the major is classified. Majors provide specializations, which give students alternative ways of completing the major requirements for the degree. Only the major is identified in the degree award.

Specialization - A collection of courses that vary by 9 - 15 credit hours from the major requirements of the degree program under which the parent major is classified. Both the name of the major and the name of the specialization are identified in the degree award.

Certificate Program - A program of study of fewer than two years in length with a major in an occupational area with a minimum of 10 credit hours that may include courses numbered 10 - 299.

Career Studies Program - A program of study of less than one year in length in an occupational area (fewer than 30 credit hours) that may include courses numbered 10 - 299.

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-16 – GRADUATION REQUIREMENTS

Policy Number: I-16

Last Reviewed: September 18, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

Graduation Requirements

Individuals are eligible for graduation with an associate's degree, certificate, or career studies certificate when they have fulfilled all of the course and credit hour requirements of the degree or certificate with at least twenty-five percent of the total semester hours acquired in residence at Virginia Western Community College. The individual must also:

- Be certificated to graduate by an appropriate college official
- Earn a curricular grade point average (GPA) of at least 2.0 in all courses which are applicable to graduation in the curriculum
- File an application for graduation with the Records Office (which is waived for the General Education Certificate)
- Resolve all financial obligations to the college and return all library and college learning materials
- Pay the graduation fee
- Meet any other competency requirements established by Virginia Western

16.1 Multiple Degrees

Students may be eligible to graduate with multiple degrees or certificates, provided the content of the curricula differ by at least twenty-five percent. However, students are not eligible to receive more than one degree in the same curriculum. For example, a student earning an AAS in Management will be ineligible to receive an AAS in Management with a Marketing Specialization.

For a list of curricula NOT eligible for Multiple Degrees, please visit this webpage:
<https://www.viriniawestern.edu/services/graduation/multipldegrees.php>

16.2 Catalog Year

The Catalog Year (also known as Requirement Term) used to determine graduation eligibility is the one in effect at the time the student declared the program or any Catalog Year thereafter, as long as the student has maintained active status. If the student has a break in enrollment that results in discontinuance, the Catalog Year in effect at the time of the student's re-admission or any Catalog Year thereafter, is the Catalog Year used to determine graduation eligibility. Upon re-admission after discontinuance, students may only declare programs of study in active status. A student cannot be re-admitted to a program that has been inactivated.

In the event that a student remains in active status, but their program of study is inactivated, the academic school responsible for the inactivated program will notify the student of their options, including the time period required for completing the program.

The Catalog Year used to determine graduation eligibility cannot be more than five years prior to the time of graduation.

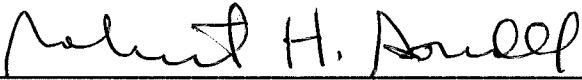
16.3 Graduation with Honors

Students who have fulfilled the requirements of degree or certificate programs (with the exception of career studies certificates) are eligible for graduation honors. Appropriate honors based on scholastic achievements are recorded on the student's permanent record as listed below:

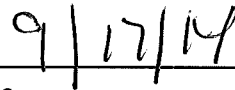
Minimum Cumulative Grade Point Average (GPA)	Honor
3.2	Cum laude (with honor)
3.5	Magna cum laude (with high honor)
3.8	Summa cum laude (with highest honor)

Updated: 2/2014; 5/2014; 8/2014; 9/2014

Approved by



Robert H. Sandel, Ed.D.
President



Date

VIRGINIA WESTERN COMMUNITY COLLEGE

I – ACADEMIC & STUDENT AFFAIRS POLICIES

I-28 – COURSE SUBSTITUTIONS

Policy Number: I-28

Last Reviewed: March 18, 2014

Responsible Dept.: VICE PRESIDENT OF ACADEMIC AND STUDENT AFFAIRS

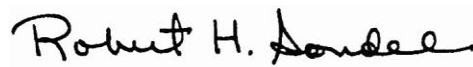
Course Substitutions

A course substitution is a course that takes the place of a required course in a curriculum. Course substitutions must meet content and/or spirit of the curriculum requirement. Course substitution requests must be submitted through a completed *Petition for Course Substitution*. This petition must include a justification as to how the requested substitution meets the content and the spirit of the requirement. The *Petition for Course Substitution* must be reviewed by the academic dean responsible for the student's program of study.

Students are limited to a maximum of three (3) course substitutions for each program of study in which they are enrolled, with the exception of quarter credit conversions and other limited exceptions. Substitutions may not be made across unrelated academic disciplines.

Students must have completed, be currently enrolled in, or have transferred credit to Virginia Western for the requested course to be approved as a substitution.

Approved by



Robert H. Sandel, Ed.D.
President

Date: 3/28/2014

Review/Revised: 5/2013; 3/2014

GENERAL EDUCATION GOALS AND STUDENT LEARNING OUTCOMES

The importance of providing every graduate with a strong background in general education is reflected in both the structure and content of the associate degree programs at Virginia Western Community College. Programs typically devote twenty-five percent or more of the required for graduation to the study of general education courses, including at least one course from each of the following: Humanities, Arts, Social/Behavior Sciences, Natural Sciences/Mathematics, and Health/Physical Education. These general education courses, specific courses in the major field, orientation sessions, and extracurricular activities, are designed to provide each graduate with a collegiate experience that supports the development of the following general education goals:

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:

1. understand and interpret complex materials;
2. assimilate, organize, develop, and present an idea formally and informally;
3. use standard English;
4. use appropriate verbal and non-verbal responses in interpersonal relations and group discussions;
5. use listening skills;
6. recognize the role of culture in communication.

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:

1. discriminate among degrees of credibility, accuracy, and reliability of inferences drawn from given data;
2. recognize parallels, assumptions, or presuppositions in any given source of information;
3. evaluate the strengths and relevance of arguments on a particular question or issue;
4. weigh evidence and decide if generalizations or conclusions based on the given data are warranted;
5. determine whether certain conclusions or consequences are supported by the information provided;
6. use problem solving skills.

CULTURAL AND SOCIAL UNDERSTANDING

A culturally and socially competent person possesses an awareness, understanding, and appreciation of the interconnectedness of the individual and cultural dimensions within and across local, regional, state, national, and global communities. Degree graduates will demonstrate the ability to:

1. assess the impact that social institutions have on individuals and culture—past, present, and future;
2. describe their own as well as others' personal ethical systems and values within social institutions;
3. recognize the impact that arts and humanities have upon individuals and cultures;
4. recognize the role of language in social and cultural contexts;
5. recognize the interdependence of distinctive worldwide social, economic, geopolitical, and cultural systems.

INFORMATION LITERACY

A person who is competent in information literacy recognizes when information is needed and has the ability to locate, evaluate, and use effectively (adapted from the American Library Association definition). Degree graduates will demonstrate the ability to:

1. determine the nature and extent of the information needed;
2. access needed information effectively and efficiently;
3. evaluate information and its sources critically and incorporate selected information into his or her knowledge base;
4. use information effectively, individually or as a member of a group, to accomplish a specific purpose;
5. understand many of the economic, legal, and social issues surrounding the use of information and access and use information ethically and legally.

PERSONAL DEVELOPMENT

An individual engaged in personal development strives for physical wellbeing and emotional maturity. Degree graduates will demonstrate the ability to:

1. develop and/or refine personal wellness goals;
2. develop and/or enhance the knowledge, skills, and understanding to make informed academic, social, personal, career, and interpersonal decisions.

QUANTITATIVE REASONING

A person who is competent in quantitative reasoning possesses the skills and knowledge necessary to apply the use of logic, numbers mathematics to deal effectively with common problems and issues. A person who is quantitatively literate can use numerical, geomet measurement data and concepts, mathematical skills, and principles of mathematical reasoning to draw logical conclusions and to ma well-reasoned decisions. Degree graduates will demonstrate the ability to:

1. use logical and mathematical reasoning within the context of various disciplines;
2. interpret and use mathematical formulas;
3. interpret mathematical models such as graphs, tables and schematics and draw inferences from them;
4. use graphical, symbolic, and numerical methods to analyze, organize, and interpret data;
5. estimate and consider answers to mathematical problems in order to determine reasonableness;
6. represent mathematical information numerically, symbolically, and visually, using graphs and charts.

SCIENTIFIC REASONING

A person who is competent in scientific reasoning adheres to a self-correcting system of inquiry (the scientific method) and relies on evidence to describe, understand, predict, and control natural phenomena. Degree graduates will demonstrate the ability to:

1. generate an empirically evidenced and logical argument;
2. distinguish a scientific argument from a non-scientific argument;
3. reason by deduction, induction and analogy;
4. distinguish between causal and correlational relationships;
5. recognize methods of inquiry that lead to scientific knowledge.

COMPUTER COMPETENCY

Virginia Western Community College ensures that students are able to demonstrate college entry-level computer skills necessary for academic success and discipline-specific skills necessary for successful transfer or employment.

PROGRAM COMPETENCIES

The AS and AA degree programs are designed for students who plan to transfer to a four-year college or university baccalaureate deg Upon completion of an AA or AS program, the graduate should have:

1. A broad, general education and the knowledge and skills required of all associate degree students at Virginia Western;
2. Computer literacy competencies required of all associate degree students at Virginia Western;
3. The educational knowledge and skills resulting from completing a core of major courses that will provide support for the studen transfer goals;
4. The course work needed to transfer as an upper-level student to a four-year college or university with little or no loss of credit;
5. The academic background and study skills needed to succeed after transferring to a baccalaureate degree program.

AAS degree programs are designed to prepare students for direct entry into the job market in technical and paraprofessional fields. A the programs also prepare students to transfer to selected baccalaureate degree programs. Upon completion of an AAS degree progr graduate should have:

1. A broad, general education and the knowledge and skills required of all associate degree students at Virginia Western;
2. Computer literacy competencies required of all associate degree students at Virginia Western;
3. The educational background and occupational training necessary for immediate employment;
4. The skills and knowledge needed to perform satisfactorily on the job;
5. The course work necessary to transfer to and succeed in baccalaureate degree programs that accept transfer students from tect degree programs.

Certificate programs are designed to prepare students for direct entry into the job market as technicians, skilled, and semi-skilled wo Upon completion of a certificate program, the graduate should have:

1. A background in general education;

2. The educational background and occupational training necessary for immediate employment;
3. The skills and knowledge needed to perform satisfactorily on the job.

Career Studies programs are designed to prepare students for direct entry into the job market in occupational fields that require entry-level skills and knowledge. Some of the programs also provide persons already employed with an opportunity to upgrade their skills and knowledge. Upon completion of a career studies program, the graduate should have:

1. Entry-level skills and knowledge needed for immediate employment in selected fields;
2. The skills and knowledge needed to perform satisfactorily on the job;
3. Up-to-date knowledge and skills in a designated occupational area.

OUTCOMES ASSESSMENT REQUIREMENT

Students may be required to take one or more tests designed to measure general education achievement and/or achievement in selected major areas prior to graduation for the purpose of evaluation of academic programs. No minimum score or level of achievement is required for graduation. Test results will remain confidential and will be used for the sole purpose of improvement of the college.

Table 5-1A
VCCS Degree Requirements

Area	Distribution				
<p>GENERAL EDUCATION General education is that portion of the collegiate experience that addresses the knowledge, skills, attitudes, and values characteristic of educated persons. It is unbounded by disciplines and honors the connections among bodies of knowledge. The associate degree programs within the VCCS support a collegiate experience that focuses on seven goal areas: <i>communication; critical thinking; cultural and social understanding; information literacy; personal development; quantitative reasoning; scientific reasoning.</i>) The general education goal areas outlined below are to be introduced in the foundational courses and enhanced in program and elective courses. (NOTE: Some of the categories include two goal areas when a single course may provide foundations in both goal areas.)</p> <table border="1"> <tr> <td> <p>I. Foundations In Communication: Courses designed to enable students to interact with others using all forms of communication, resulting in understanding and being understood.</p> </td> <td> <p>II. Foundations In Critical Thinking And Information Literacy: Courses designed to enable students to evaluate evidence carefully and apply reasoning to decide what to believe and how to act, and to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.</p> </td> </tr> <tr> <td> <p>III. Foundations In Cultural And Social Understanding: Courses designed to enable students to have an awareness, understanding, and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national, and global communities.</p> </td> <td> <p>IV. Foundations In Personal Development: Courses designed to enable students to strive for physical well-being and emotional maturity.</p> </td> </tr> </table> <p>V. Foundations In Quantitative And Scientific Reasoning: Courses designed to enable students to possess the skills and knowledge necessary to apply the use of logic, numbers, and mathematics to deal effectively with common problems and issues, and to adhere to a self-correcting system of inquiry (the scientific method) and rely on empirical evidence to describe, understand, predict, and control natural phenomena.</p>	<p>I. Foundations In Communication: Courses designed to enable students to interact with others using all forms of communication, resulting in understanding and being understood.</p>	<p>II. Foundations In Critical Thinking And Information Literacy: Courses designed to enable students to evaluate evidence carefully and apply reasoning to decide what to believe and how to act, and to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.</p>	<p>III. Foundations In Cultural And Social Understanding: Courses designed to enable students to have an awareness, understanding, and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national, and global communities.</p>	<p>IV. Foundations In Personal Development: Courses designed to enable students to strive for physical well-being and emotional maturity.</p>	<p>Minimum 15 credits (Students must take at least one course in each of the five areas listed, to total at least 15 credits.)</p>
<p>I. Foundations In Communication: Courses designed to enable students to interact with others using all forms of communication, resulting in understanding and being understood.</p>	<p>II. Foundations In Critical Thinking And Information Literacy: Courses designed to enable students to evaluate evidence carefully and apply reasoning to decide what to believe and how to act, and to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.</p>				
<p>III. Foundations In Cultural And Social Understanding: Courses designed to enable students to have an awareness, understanding, and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national, and global communities.</p>	<p>IV. Foundations In Personal Development: Courses designed to enable students to strive for physical well-being and emotional maturity.</p>				
<p>PROGRAM REQUIREMENTS Major Field Core Related/Specialization Courses Electives</p>	<p>Minimum 15 credits* Maximum 15 credits 0-15 credits</p>				
<p>TOTALS</p>	<p>AA/AS/AA&S: 60-63 credits**</p>				
	<p>AAA/AAS: 65-69 credits***</p>				

*Language in Section 5.1.0.0.1 of the VCCS Policy Manual states 25% of the courses in the degree program (15-18 credits) must be common across majors within a degree. The shared courses must be major or related/specialization courses.

**Credit range for engineering programs is 60-72 semester hour credits.

***Credit range for AAA/AAS programs is 65-69, including nursing. For other programs in the Health Technologies, the range is 65-72 semester hour credits.

Table 5-1B
Minimum Requirements for
Associate Degrees in the VCCS

General Education:	Minimum Number of Semester Hour Credits			
	(1) <u>AA</u>	(2) <u>AS</u>	(3) <u>AA&S</u>	(4) <u>AAA / AAS</u>
Communication ^(a)	6	6	6	3
Humanities / Fine Arts	6	6	6	3
Foreign Language (Intermediate Level)	6	0	0	0
Social / Behavioral Sciences	9	9 ^(b)	9	3 ^(c)
Natural Sciences / Mathematics	7	7	7	0
Personal Development ^(e)	2	2	2	2
Other Requirements for Associate Degrees:				
Major field courses and electives (columns 1-3)	18-21	24-27	24-27	49-53 ^(f)
Career/technical courses (column 4)	_____	_____	_____	_____
Total for Degree^(g) =	60-63	60-63^(h)	60-63^(h)	65-69^(h)

Notes: The VCCS Policy Manual, Section 2-IV-C, defines general education within the VCCS. Sections 2.7.3, 3.4.10, and 3.5.1 of the Southern Association of Colleges and Schools (SACS) Principles of Accreditation specify general education requirements. Colleges must address all SACS requirements, the SCHEV Core Competencies, and the general education goal areas listed in this VCCS Policy Manual.

- (a) Must include at least one course in English composition.
- (b) Only 6 semester hours of social/behavioral sciences are required for engineering majors who plan to transfer to a baccalaureate degree engineering program that requires 6 or fewer hours in this category, provided that the college/university publishes such requirements in its transfer guide.
- (c) While general education courses other than those designed for transfer may be used to meet portions of these requirements, SACS principles require that general education courses be general in nature and must not "... narrowly focus on those skills, techniques, and procedures peculiar to a particular occupation or profession."
- (d) Only 3 semester hours of mathematics are required for the General Studies major.
- (e) Personal development includes health, physical education, or recreation courses that promote physical and emotional well being and student development courses. Must include at least one student development course.
- (f) AAA/AAS degrees must contain a minimum of 15 semester hours of general education. Students should plan to take at least 30 hours in the major; the remaining hours will be appropriate to the major.
- (g) All college-level course prerequisites must be included in the total credits required for each program.
- (h) Credit range for engineering programs is 60-72 semester hour credits. Credit range for AAA/AAS programs is 65-69, including nursing. For other programs in the Health Technologies, the range is 65-72 semester hour credits.

**Table 5-2
Minimum Requirements for
Diplomas, Certificates, and Career Studies Certificates**

	Diploma	Certificate	Career Studies Certificate
Definition	A two-year curriculum with an emphasis in a career/technical area	A curriculum that consists of a minimum of 30 semester credit hours	A program of study of not less than 9 nor more than 29 semester credit hours
Course Requirements	May include any appropriate courses numbered 10-299	May include any appropriate courses numbered 10-299	May include any appropriate courses numbered 10-299
General Education Requirements	A minimum of fifteen percent (15%) of credit hour requirements shall be in general education, including 1 three-credit English course.	A minimum of fifteen percent (15%) of credit hour requirements shall be in general education, including 1 three-credit English course.	There are no general education requirements.
Graduation Requirements	See p 5-8 <ul style="list-style-type: none"> ▪ 25% of courses must be taken at home institution. ▪ 2.0 GPA ▪ Graduation honors eligible 	See p 5-8 <ul style="list-style-type: none"> ▪ 25% of courses must be taken at home institution. ▪ 2.0 GPA ▪ Graduation honors eligible 	See page 5-8 <ul style="list-style-type: none"> ▪ 25% of courses must be taken at home institution. ▪ 2.0 GPA ▪ Not eligible for graduation honors
Approval	State Board for Community Colleges	Chancellor	Local College Board

Approved List of General Education Electives - List A

The purpose of these lists of courses is to assist students in their selection of required electives. Each program of study specifies the list from which electives must be chosen. Students must review the requirements for their degree program to ensure electives are chosen from the correct list. Electives should be selected carefully in conjunction with a faculty advisor. Students who intend to transfer should verify specific requirements with their four-year institution.

Humanities/Fine Arts Electives:

ART 101-102... History and Appreciation of ART I-II+
CST 130 Introduction to Theatre
ENG 241-242 .. Survey of American Literature I-II+
ENG 243-244 .. Survey of English Literature I-II+
ENG 251-252 .. Survey of World Literature I-II+
FRE 201-202... Intermediate French I-II
HUM 201-202. Survey of Western Culture I-II+
MUS 121-122.. Music Appreciation I-II+
PHI 101 Introduction to Philosophy I
PHI 220 Ethics
REL 200 Survey of the Old Testament
REL 210 Survey of the New Testament
REL 230 Religions of the World
REL 231-232... Religions of the World I-II+
SPA 201-202 ... Intermediate Spanish I-II

Health and Physical Education Electives:

HLT 110 Concepts of Personal & Community Health
HLT 230 Principles of Nutrition & Human Development

Mathematics Electives:

MTH 151-152.. Mathematics for the Liberal Arts I-II+
MTH 157 Elementary Statistics
MTH 163 Pre-Calculus I
MTH 166 Pre-Calculus with Trigonometry
MTH 173-174.. Calculus with Analytic Geometry I-III
MTH 241-242.. Statistics I-II
MTH 271-272.. Applied Calculus I-II

Science Sequence:¹

BIO 101-102.... General Biology I-II
BIO 141-142.... Human Anatomy and Physiology
CHM 111-112. College Chemistry I-II
GOL 105-106 .. Physical/Historical Geology+
NAS 131-132 .. Astronomy I-II+
PHY 201-202... General College Physics I-II
PHY 241-242... University Physics I-II

Social Science Electives:

ECO 201 Principles of Macroeconomics
ECO 202 Principles of Microeconomics
GEO 210 People & the Land: Intro to Cultural Geography
GEO 220 World Regional Geography
HIS 111-112 ... History of World Civilization I-II+
HIS 121-122 United States History I-II+
PLS 211-212 ... United States Government I-II+
PSY 200 Principles of Psychology
PSY 215 Abnormal Psychology
PSY 216 Social Psychology
PSY 230 Developmental Psychology
PSY 235 Child Psychology
PSY 236 Adolescent Psychology
SOC 200 Principles of Sociology
SOC 215 Sociology of the Family
PSY 225 Theories of Personality
SOC 266 Race and Ethnicity

¹ A two semester sequence of the same lab science is required to fulfill a science sequence.

* (Applies to List A and List B) Either course in this sequence may be taken first.



Approved List of Transfer Electives- List B

Business Electives:

- ACC 211-212** Principles of Accounting I-II
- BUS 221-222** Business Statistics I-II
- ITE 115** Intro Computer Applications and Concepts

Computer Science Electives:

- CSC 201-202** Computer Science I-II

Communication Electives:

- CST 100** Principles of Public Speaking
- ENG 111-112** College Composition I-II
- ENG 210** Advanced Composition

Health and Physical Education Electives:

- HLT 110** Concepts of Personal & Community Health
- HLT 230** Principles of Nutrition & Human Development

Humanities/Fine Arts Electives:

- ART 101-102** History and Appreciation of ART I-II+
- ART 121-122** Drawing I-II
- ART 241-242** Painting I-II
- ART 243-244** Watercolor I-II
- ART 131-132** Fundamentals of Design I-II
- CST 130** Introduction to Theatre
- ENG 241-242** Survey of American Literature I-II+
- ENG 243-244** Survey of English Literature I-II+
- ENG 251-252** Survey of World Literature I-II+
- FRE 101-102** Beginning French I-II
- FRE 201-202** Intermediate French I-II
- HUM 201-202** Survey of Western Culture I-II +
- MUS 121-122** Music Appreciation I-II+
- PHI 101** Introduction to Philosophy I
- PHI 220** Ethics
- PHT 101** Photography I
- REL 200** Survey of the Old Testament
- REL 210** Survey of the New Testament
- REL 230** Religions of the World
- REL 231-232** Religions of the World I-II+
- REL 247** History of Christianity
- SPA 101-102** Beginning Spanish I-II
- SPA 201-202** Intermediate Spanish I-II

Mathematics Electives:

- MTH 151-152** Mathematics for the Liberal Arts I-II+
- MTH 157** Elementary Statistics
- MTH 163** Pre-Calculus I
- MTH 166** Pre-Calculus with Trigonometry
- MTH 173-174** Calculus with Analytic Geometry I-II
- MTH 177** Introduction to Linear Algebra
- MTH 241-242** Statistics I-II
- MTH 271-272** Applied Calculus I-II
- MTH 277** Vector Calculus
- MTH 285** Linear Algebra
- MTH 287** Mathematical Structures
- MTH 291** Differential Equations

Science Electives with Lab:

- BIO 101-102** General Biology I-II
- BIO 141-142** Human Anatomy and Physiology
- BIO 205** General Microbiology
- BIO 206** Cell Biology
- BIO 215** Plant Life of Virginia
- BIO 270** General Ecology
- BIO 271** Introduction to Ecological Systems
- CHM 111-112** College Chemistry I-II
- CHM 241-242** Organic Chemistry I-II
- CHM 245-246** Organic Chemistry Lab I-II
- GOL 105-106** Physical/Historical Geology[†]
- NAS 131-132** Astronomy I-II+
- PHY 201-202** General College Physics I-II
- PHY 241-242** University Physics I-II

Science Electives without Lab:

- BIO 220** Immunology
- BIO 285** Biological Problems in Contemporary Society
- ENV 161** Intro to Environmental Compliance
- ENV 162** Environmental Principles in Public Health

Social Science Electives:

- ECO 201** Principles of Macroeconomics
- ECO 202** Principles of Microeconomics
- GEO 200** Introduction to Physical Geography
- GEO 210** People & the Land: Intro to Cult Geography
- GEO 220** World Regional Geography
- HIS 111-112** History of World Civilization I-II+
- HIS 121-122** United States History I-II+
- HIS 205** Local History
- HIS 267** The Second World War
- PLS 211-212** United States Government I-II+
- PSY 200** Principles of Psychology
- PSY 215** Abnormal Psychology
- PSY 216** Social Psychology
- PSY 225** Theories of Personality
- PSY 230** Developmental Psychology
- PSY 235** Child Psychology
- PSY 236** Adolescent Psychology
- SOC 200** Principles of Sociology
- SOC 215** Sociology of the Family
- SOC 266** Race and Ethnicity

[†] A two semester sequence of the same lab science is required to fulfill a science sequence.

[‡] (Applies to List A and List B) Either course in this sequence may be taken first.

Associate of Arts 648

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in English, foreign language, humanities, journalism, liberal arts, philosophy, pre-law, or speech/drama.

A specialization is also available in fine arts.

Program Objectives: To prepare students for transfer to a four-year college or university.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	SDV	100	College Success Skills (or SDV 108)	1
___	___	___	Beginning Foreign Language Elective (List B) ^{1,2,3}	4
___	___	___	Social Science Elective (List B) ¹	3
___	___	___	Science Sequence (List A) ¹	4

Spring Semester

___	ENG	112*	College Composition II	3
___	ITE	115	Introduction to Computer Applications and Concepts	3
___	___	___	Beginning Foreign Language Elective (List B) ^{1,2,3}	4
___	___	___	Social Science Elective (List B) ¹	3
___	___	___	Science Sequence (List A) ¹	4

SECOND YEAR

Fall Semester

___	CST	100	Principles of Public Speaking (or CST 105)	3
___	ENG	241*	Survey of American Literature I (or ENG 243*)	3
___	HIS	111	History of World Civilization I (or HIS 121)	3
___	MTH	151*	Mathematics for the Liberal Arts I	3
___	___	___	Intermediate Foreign Language Elective (List A) ^{1,2,3}	3

Spring Semester

___	ENG	242*	Survey of American Literature II (or ENG 244*)	3
___	HIS	112	History of World Civilization II (or HIS 122)	3
___	MTH	152*	Mathematics for the Liberal Arts II (or MTH 157*)	3
___	___	___	Health or Physical Education (HLT/PED) ⁴	1
___	___	___	Intermediate Foreign Language Elective (List A) ^{1,2,3}	3

Total Minimum Credits for Degree

60

¹Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer Courses.

²French and Spanish are guaranteed to be offered at the beginning and intermediate level each year. Completion of an intermediate level foreign language sequence is required for graduation.

³Students who have completed at least two years of a high school foreign language with at least a "B" average may take the intermediate level foreign language sequence in the first year. Students who complete the intermediate language sequence in the first year are required to take the following in year two: 6 credits of Humanities/Fine Arts Electives from List B and 2 additional transfer credits from List B.

⁴Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

*This course has a requisite. Requisites for all courses are listed in the course description section of the catalog.

Liberal Arts

Fine Arts Specialization

Associate of Arts 648-01

Purpose: This curriculum is designed for students who plan to transfer to a four-year program in a professional art school or to a four-year program in fine arts.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college. A satisfactory aptitude in visual art is preferred for entry into the art program.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	ART	121	Drawing I	3
___	ENG	111*	College Composition I	3
___	SDV	100	College Success Skills (or SDV 101)	1
___	___	___	Beginning Foreign Language Elective (List B) ^{1,2,3}	4
___	___	___	Social Science Elective (List B) ¹	3

Spring Semester

___	ART	122*	Drawing II	3
___	ENG	112*	College Composition II	3
___	CST	100	Principles of Public Speaking (or CST 105)	3
___	___	___	Beginning Foreign Language Elective (List B) ^{1,2,3}	4
___	___	___	Social Science Elective (List B) ¹	3

SECOND YEAR

Fall Semester

___	ART	131	Fundamentals of Design I	3
___	HIS	111	History of World Civilization I (or HIS 121)	3
___	MTH	151*	Mathematics for the Liberal Arts I	3
___	___	___	Intermediate Foreign Language Elective ^{1,2,3}	3
___	___	___	Science Sequence (List A) ²	4

Spring Semester

___	HIS	112	History of World Civilization II (or HIS 122)	3
___	MTH	152*	Mathematics for the Liberal Arts II (or MTH 157*)	3
___	___	___	Health or Physical Education (HLT/PED) ⁴	1
___	___	___	Intermediate Foreign Language Elective ^{1,2,3}	3
___	___	___	Science Sequence (List A) ²	4

Total Minimum Credits for Degree

60

¹Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer Courses.

²French and Spanish are guaranteed to be offered at the beginning and intermediate level each year. Completion of an intermediate level foreign language sequence is required for graduation.

³Students who have completed at least two years of a high school foreign language with at least a "B" average may take the intermediate level foreign language sequence in the first year. Students who complete the intermediate language sequence in the first year should take the following in year two: ENG 241 and ART 132 and 2 additional transfer credits from List B.

⁴Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

*This course has a requisite. Requisites for all courses are listed in the course description section of the catalog.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

Associate of Science 213

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in a business-related field.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8, and 9.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs. (ACBSP)

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

Business Administration

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	HIS	111	History of World Civilization I	3
___	MTH	163*	Precalculus I	3
___	SDV	100	College Success Skills (or SDV 108)	1
___	___	___	Science Sequence Elective (List A) ¹	4

Spring Semester

___	BUS	100	Introduction to Business	3
___	ENG	112*	College Composition II	3
___	MTH	271*	Applied Calculus I	3
___	___	___	Science Sequence Elective (List A) ¹	4

SECOND YEAR

Fall Semester

___	ACC	211*	Principles of Accounting I	4
___	ECO	202	Principles of Microeconomics	3
___	ENG	241*	Survey of American Literature ((or ENG 243)	3
___	___	___	Health or Physical Education (HLT/PED) ²	2
___	ITE	115	Intro to Computer Applications and Concepts	3
___	MTH	241*	Statistics I ³	3

Spring Semester

___	ACC	212*	Principles of Accounting II	4
___	CST	100	Principles of Public Speaking	3
___	ECO	201	Principles of Macroeconomics	3
___	MTH	242*	Statistics II ⁴	3
___	___	___	Humanities/Fine Arts Elective (List B) ¹	3

Total Minimum Credits for Degree

61

¹Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

²Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

³BUS 221 or BUS 225 may be taken in place of MTH 241.

⁴BUS 222 or an elective from List B based on the requirements of their college of choice may be taken in place of MTH 242.

*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of Science 831

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree. The following engineering fields are supported by this program: aerospace and ocean, biological systems, chemical, civil and environmental, electrical and computer, engineering science and mechanics, industrial and systems engineering, material science, mechanical, mining and minerals.

A specialization is also available in computer science.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9. Additionally, students who do not demonstrate mastery in pre-calculus with trigonometry on the placement test will be required to complete MTH 166 prior to enrolling in MTH 173.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

FIRST YEAR

Fall Semester

___	CHM	111*	College Chemistry I	4
___	EGR	124*	Intro to Engineering and Engineering Methods	3
___	ENG	111*	College Composition I	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	MTH	173	Calculus with Analytical Geometry I	4
___	SDV	101	Orientation to Engineering (or SDV 100)	1

Spring Semester

___	EGR	120*	Introduction to Engineering	2
___	EGR	126*	Computer Programming for Engineers (C++)	3
___	EGR	140*	Engineering Mechanics - Statics	3
___	ENG	112*	College Composition II	3
___	MTH	174*	Calculus with Analytical Geometry II	4
___	___	___	Social Science Elective (List A) ²	3

SECOND YEAR

Fall Semester

___	MTH	285	Linear Algebra	3
___	MTH	277*	Vector Calculus	4
___	PHY	241*	University Physics I	4
___	___	___	Engineering/Science Elective ³	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Spring Semester

___	MTH	291*	Differential Equations	3
___	PHY	242*	University Physics II	4
___	___	___	Engineering/Science Elective ³	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	___	___	Social Science Elective (List A) ²	3

Total Minimum Credits for Degree

67

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A electives can be found on the Approved List of Transfer courses.

³ The following are suggested Engineering/Science electives for specific engineering majors: Mechanical Engineering: EGR 245/246, Civil Engineering: EGR 206/246, Electrical Engineering: EGR 206/251/255, or MTH 287, Chemical Engineering: CHM 112/ EGR 246 or CHM112/ 241/245.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Engineering - Computer Science Specialization

Associate of Science 831-01

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in computer science or information technology.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9. Additionally, students who do not demonstrate mastery in pre-calculus with trigonometry on the placement test will be required to complete MTH 166 prior to enrolling in MTH 173.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

FIRST YEAR

Fall Semester

___	CSC	201*	Computer Science I	4
___	EGR	124*	Intro to Engineering and Engineering Methods	3
___	ENG	111*	College Composition I	3
___	MTH	173	Calculus with Analytical Geometry I	4
___	SDV	101	Orientation to Engineering (or SDV 100)	1
___	___	___	Social Science Elective (List A) ²	3

Spring Semester

___	CSC	202*	Computer Science II	4
___	EGR	120*	Introduction to Engineering	2
___	ENG	112*	College Composition II	3
___	MTH	174*	Calculus with Analytical Geometry II	4
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

SECOND YEAR

Fall Semester

___	CSC	205	Computer Organization	4
___	MTH	277*	Vector Calculus	4
___	PHY	241*	University Physics I (or CHM 111)	4
___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	MTH	285	Linear Algebra	3

Spring Semester

___	PHY	242*	University Physics II	4
___	MTH	291*	Differential Equations	3
___	___	___	Social Science Elective (List A)	3
___	___	___	Engineering/Science Elective ³	3
___	MTH	287	Mathematical Structures	3

Total Minimum Credits for Degree

69

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A electives can be found on the Approved List of Transfer courses.

³ Engineering/Science Elective - students transferring to Virginia Tech should take CHM 111 or PHY 241 (whichever they did not choose above). Those transferring to other four year institutions should take EGR 126 or contact their advisor for approval on choice for this elective.

* This course has a prerequisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of Science 699

Purpose: This curriculum is designed to satisfy the general education component of a baccalaureate degree for students who intend to transfer to a four-year institution.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

General Studies

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	ITE	115	Introduction to Computer Applications and Concepts	3
___	MTH	151*	Mathematics for Liberal Arts I (or MTH 163*)	3
___	SDV	100	College Success Skills (or SDV 108)	1
___	___	___	Social Science Elective (List B) ¹	3
___	___	___	Science Sequence Elective (List A) ¹	4

Spring Semester

___	ENG	112*	College Composition II	3
___	MTH	152*	Mathematics for the Liberal Arts II (or MTH 157* or MTH 271*) ³	3
___	___	___	Social Science Elective (List B) ¹	3
___	___	___	Science Sequence Elective (List A) ¹	4
___	___	___	Transfer Elective (List B) ¹	3

SECOND YEAR

Fall Semester

___	CST	100	Principles of Public Speaking (or CST 105)	3
___	ENG	241*	Survey of American Literature I (or ENG 243* or ENG 251*)	3
___	HIS	111	History of World Civilization I (or HIS 121)	3
___	___	___	Humanities/Fine Arts Elective (List B) ¹	3
___	___	___	Transfer Elective (List B) ¹	3

Spring Semester

___	ENG	242*	Survey of American Literature II (or ENG 244* or ENG 252*)	3
___	HIS	112	History of World Civilization II (or HIS 122)	3
___	___	___	Health or Physical Education (HLT/PED) ²	3
___	___	___	Humanities/Fine Arts Elective (List B) ¹	3

Total Minimum Credits for Degree

60

¹ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

² Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

³ At least one semester of math must be completed for the degree. If only one semester of math is taken, an elective must be selected from List B of the Approved List of Transfer Electives – excluding PE courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

Associate of Science 880

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in a science discipline or pre-professional program.

Students may elect to specialize in Health Sciences, Integrated Environmental Studies and Mathematics.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses prior to enrollment in this program.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	ITE	115	Intro to Computer Applications and Concepts (or CSC 201)	3
___	MTH	163*	Precalculus I (or MTH 166)	3
___	SDV	100	College Success Skills (or SDV 108)	1
___	___	___	Science Sequence Elective with Lab I ²	4

Spring Semester

___	ENG	112*	College Composition II	3
___	MTH	271*	Applied Calculus I (or MTH 173)	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	___	___	Science Sequence Elective with Lab II ²	4
___	___	___	Transfer Elective (List B) ²	3

SECOND YEAR

Fall Semester

___	HIS	121	United States History I (or HIS 111)	3
___	MTH	272*	Applied Calculus II (or MTH 174)	3
___	___	___	Science Sequence Elective with Lab I ²	4
___	___	___	Social Science Elective (List A) ²	3

Spring Semester

___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	___	___	Science Sequence Elective with Lab II ²	4
___	___	___	Science Elective - no lab ^{2,3}	3
___	___	___	Social Science Elective (List B) ²	3
___	___	___	Transfer Elective (List B) ²	3

Total Minimum Credits for Degree

60

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

³ A science elective with lab (List B) may also be used to satisfy this requirement.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

For program specific information please go to the program website.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

Science

Program Notes: Students preparing for a major in **pre-medicine, pre-dentistry, pre-pharmacy, pre-physician's assistant or pre-veterinary** should complete the curricular program in Science and select BIO 101-102 and CHM 111-112 to fulfill the required 16 credits of Science Elective with Lab. It is strongly recommended that PHY 201-202 General College Physics be taken to fulfill the Science Elective and Transfer Elective requirements. Many pre-professional programs also require Organic Chemistry; which is offered every other year in even years.

Students preparing for a **major in biology** should complete in their science electives BIO 101-102, BIO 205, BIO 206, BIO 220, as well as CHM 111-112. Students should consult transfer institution for appropriate math sequence.

Students preparing for a **major in chemistry** should complete in their science electives CHM 111-112, CHM 241/245, CHM 242/244, as well as BIO 101-102. Students preparing for a major in chemistry should complete in their math sequence MTH 166 and MTH 173-174.

Students preparing for a **major in earth sciences** should complete in their science electives GOL 105-106, as well as selecting from BIO 101-102 or CHM 111-112, depending on the demands of the transfer institution. Math electives typically are MTH 166, MTH 173-174. Students should verify math sequence with their transfer institution.

Students preparing for a **major in physics, astronomy, or astrophysics** should complete in their science electives PHY 241-242, CHM 111-112, MTH 166, MTH 173-174, MTH 277, MTH 285 and MTH 291.

Students preparing for a **major in environmental science, ecology, or forestry** should pursue the Integrated Environmental Studies Specialization.

Students preparing for a **major in mathematics, mathematics education, or statistics** should pursue the Specialization in Mathematics.

Students preparing for a **major in a health field such as Nursing or other allied health field** and who desire a BS degree, should pursue the Specialization in Health Sciences.

Science - Health Sciences Specialization

Associate of Science 880-02

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in a health field such as nursing, nutrition, health education, or allied health programs including physical or occupational therapy.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses prior to enrollment in this program.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	CHM	111*	College Chemistry I	4
___	ENG	111*	College Composition I	3
___	HIS	121	United States History I (or HIS 111)	3
___	ITE	115	Intro to Computer Applications and Concepts (or CSC 201)	3
___	MTH	151*	Mathematics for the Liberal Arts I	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	CHM	112*	College Chemistry II	4
___	ENG	112*	College Composition II	3
___	HLT	230*	Principles of Nutrition and Human Development	3
___	MTH	157*	Elementary Statistics (or MTH 152)	3
___	PSY	200	Principles of Psychology	3

SECOND YEAR

Fall Semester

___	BIO	141*	Human Anatomy and Physiology	4
___	PLS	211	US Government I (or ECO 201)	3
___	SOC	200	Principles of Sociology	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Spring Semester

___	BIO	142*	Human Anatomy and Physiology	4
___	BIO	205	General Microbiology	4
___	PSY	230*	Developmental Psychology	3
___	___	___	Humanities/Fine Arts Elective (List B) ²	3

Total Minimum Credits for Degree

60

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

³ A science elective with lab (List B) may also be used to satisfy this requirement.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

Science - Integrated Environmental Studies Specialization

Associate of Science 880-05

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in environmental science, environmental biology, natural resource management, forestry or wildlife science.

Program Objectives: Graduates who do not plan to transfer may pursue employment at the technical level as environmental science and protection technicians working with natural resources, agriculture, water resources, or waste water management.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

FIRST YEAR

Fall Semester

___	BIO	101*	General Biology I	4
___	ENG	111*	College Composition I	3
___	ENV	161	Introduction to Environmental Compliance	3
___	PLS	211	US Government I (or ECO 201) ¹	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	BIO	102*	General Biology II	4
___	ENG	112*	College Composition II	3
___	ENV	162	Environmental Principles in Public Health	3
___	PHI	220	Ethics	3
___	PLS	212	US Government II (or ECO 202) ¹	3

SECOND YEAR

Fall Semester

___	GEO	210	People and the Land: Intro to Cultural Geography	3
___	MTH	163*	Precalculus I (or MTH 271)	3
___	___	___	Health or Physical Education (HLT/PED) ²	3
___	___	___	IES Elective ³	4
___	___	___	IES Elective ³	4

Spring Semester

___	BIO	285	Biological Problems in Contemporary Society	3
___	HUM	202	Survey of Western Culture II	3
___	___	___	IES Elective ³	4
___	MTH	157*	Elementary Statistics	3

Total Minimum Credits for Degree

60

¹ ECO 201-202 may be taken in place of PLS 211-212.

² Consult approved Transfer Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

³ Choose three IES electives from the following 4-credit courses: BIO 270* General Ecology, BIO 271* Introduction to Ecological Systems, CHM 111* College Chemistry I, CHM 112* College Chemistry II, or GOL 105 Physical Geology

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Science - Mathematics Specialization

Associate of Science 880-04

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution and major in mathematics, mathematics education, or statistics. This program is suitable for students pursuing baccalaureate degrees in physics, chemistry, engineering, or computer science.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9. Additionally, students who do not demonstrate mastery in pre-calculus with trigonometry on the placement test will be required to complete MTH 166 prior to enrolling in MTH 173.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	CHM	111*	College Chemistry I	4
___	ENG	111*	College Composition I	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	MTH	173*	Calculus with Analytic Geometry II	4
___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	CHM	112*	College Chemistry II	4
___	ENG	112*	College Composition II	3
___	HIS	121	United States History I	3
___	MTH	174*	Calculus with Analytic Geometry II	4

SECOND YEAR

Fall Semester

___	MTH	277*	Vector Calculus	4
___	MTH	285*	Linear Algebra	3
___	PHY	241*	University Physics I	4
___	___	___	Social Science Elective (List A) ²	3

Spring Semester

___	MTH	287*	Mathematical Structures	3
___	MTH	291*	Differential Equations	3
___	PHY	242*	University Physics II	4
___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	___	___	Social Science Elective (List A) ²	3

Total Minimum Credits for Degree

60

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

Associate of Science 882

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution and complete a baccalaureate degree in fields such as anthropology, economics, history, pre-law, political science, psychology, social sciences or sociology.

A Specialization in Education is also offered for students who want to prepare to teach at the elementary or secondary school level.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	HIS	121	United States History I (or HIS 111)	3
___	MTH	151*	Mathematics for the Liberal Arts I	3
___	SDV	100	College Success Skills (or SDV 108)	1
___	___	___	Social Science Elective (List B) ²	3
___	___	___	Science Sequence (List A) ²	4

Spring Semester

___	ENG	112*	College Composition II	3
___	HIS	122	United States History II (or HIS 112)	3
___	MTH	152*	Mathematics for the Liberal Arts II (or MTH 157*)	3
___	___	___	Social Science Elective (List B) ²	3
___	___	___	Science Sequence (List A) ²	4

SECOND YEAR

Fall Semester

___	ENG	241*	Survey of American Literature I (or Eng 243*)	3
___	ITE	115	Introduction to Computer Applications and Concepts	3
___	PSY	200*	Principles of Psychology	3
___	___	___	Social Science Elective (List B) ²	3

Spring Semester

___	CST	100	Principles of Public Speaking	3
___	___	___	Health or Physical Education (HLT/PED) ¹	3
___	___	___	Humanities/Fine Arts Elective (List B) ²	3
___	SOC	200	Principles of Sociology	3
___	___	___	Social Science Elective (List B) ²	3

Total Minimum Credits for Degree

60

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

Social Sciences Education Specialization

Associate of Science

882-01

Purpose: This curriculum is designed for students who plan to transfer to a four-year institution to prepare for a teaching career at the elementary or secondary level.

Program Objectives: Students who wish to be teachers in Virginia must major in a content area at a four-year institution such as history, English, mathematics, science or interdisciplinary studies. Although students will be required to complete several professional education courses at the senior institution, they must major in an area besides education.

PRAXIS Exams: To teach in Virginia, students must pass the PRAXIS I and PRAXIS II examinations, which have replaced the National Teachers Exam. The PRAXIS I exam measures basic skills in reading, writing, and mathematics. It is used by some four-year institutions as an admissions requirement into their teacher education programs. Virginia Western education students should check with the institution that they plan to attend about the requirements for completing the PRAXIS I exam. The PRAXIS II exam measures content knowledge in the student's major field and is usually taken in the senior year at the four-year institution.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

FIRST YEAR

Fall Semester

___	BIO	101*	General Biology I	4
___	ENG	111*	College Composition I	3
___	HIS	121	United States History I (or HIS 111)	3
___	MTH	151*	Mathematics for the Liberal Arts I	3
___	SDV	100	College Success Skills (or SDV 108)	1
___	PSY	200*	Principles of Psychology	3

Spring Semester

___	BIO	102*	General Biology II	4
___	EDU	100	Introduction to Education	1
___	ENG	112*	College Composition II	3
___	HIS	122	United States History II (or HIS 112)	3
___	MTH	152*	Mathematics for the Liberal Arts II (or MTH 157)	3
___	PHI	101	Introduction to Philosophy I	3

SECOND YEAR

Fall Semester

___	ENG	241*	Survey of American Literature I (or Eng 243*)	3
___	ITE	115	Introduction to Computer Applications and Concepts	3
___	GEO	210	Cultural Geography	3
___	MUS	121	Music Appreciation I	3
___	SOC	200	Principles of Sociology	3

Spring Semester

___	ART	101	Art Appreciation I	3
___	CST	100	Principles of Public Speaking	3
___	___	___	Health or Physical Education (HLT/PED) ¹	2
___	PLS	211	US Government I (or ECO 201)	3

Total Minimum Credits for Degree

60

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of

Applied

Science

203

Purpose: The curriculum is designed for persons who seek employment in the accounting field.

Program Objectives: Employment opportunities include positions as a clerk in accounting, auditing, tax or management.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs. (ACBSP)

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Accounting program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	ACC	211*	Principles of Accounting I	4
___	BUS	100	Introduction to Business	3
___	ENG	111*	College Composition I	3
___	ITE	115	Intro to Computer Applications and Concepts	3
___	MTH	120*	Introduction to Mathematics (or MTH 163)	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	ACC	124	Payroll Accounting	3
___	ACC	212*	Principles of Accounting II	4
___	BUS	125*	Applied Business Mathematics	3
___	CST	105	Oral Communications (or CST 100)	3
___	ECO	201	Principles of Macroeconomics (or ECO 202)	3

SECOND YEAR

Fall Semester

___	ACC	221*	Intermediate Accounting I (Fall Only)	4
___	ACC	231*	Cost Accounting I (Fall Only)	3
___	AST	205*	Business Communications	3
___	BUS	225*	Applied Business Statistics	3
___	ITE	140	Spreadsheet Software	3

Spring Semester

___	ACC	215*	Computerized Accounting (Spring Only)	3
___	ACC	261*	Principles of Federal Taxation I	3
___	BUS	241	Business Law I	3
___	FIN	215*	Financial Management	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Total Minimum Credits for Degree

65

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of Applied Science 400

Purpose: This curriculum is designed to provide a broad educational foundation which will prepare graduates for employment in numerous criminal justice related occupations. For students already working in the criminal justice field, this curriculum will provide preparation for advancement in the profession.

Program Objectives: Employment opportunities exist in a wide variety of areas: uniformed officers for local, county and state police agencies; enforcement/investigative officers for federal government agencies; corrections, retail and industrial security, probation/parole, insurance work and private investigation.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: The Associate of Applied Science degree does not take the place of attendance at a basic academy which most police, corrections, or security agencies require prior to being employed by that agency. However, the Administration of Justice curriculum will help prepare one academically for successful completion of an agency academy.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Administration of Justice program head as listed on program webpage.

Administration of Justice

FIRST YEAR

Fall Semester

___	ADJ	100	Survey of Criminal Justice	3
___	ENG	111*	College Composition I	3
___	___	___	Health or Physical Education ¹	3
___	ITE	115	Introduction to Computer Applications and Concepts	3
___	PSY	200*	Principles of Psychology	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	ADJ	120	Introduction to Courts	3
___	CST	100	Principles of Public Speaking	3
___	ENG	112*	College Composition II	3
___	MTH	157*	Elementary Statistics	3
___	SOC	200	Principles of Sociology	3
___	ADJ	___	Administration of Justice Elective ²	3

SECOND YEAR

Fall Semester

___	ADJ	140	Introduction to Corrections	3
___	ADJ	229	Law Enforcement and the Community	3
___	ADJ	___	Administration of Justice Elective ²	3
___	___	___	Humanities/Fine Arts Elective (List B) ³	3
___	___	___	Science Sequence (List A) ³	4

Spring Semester

___	PLS	211	United States Government I	3
___	PHI	220	Ethics (or PHI 101)	3
___	ADJ	___	Administration of Justice Elective ²	3
___	ADJ	___	Administration of Justice Elective ²	3
___	___	___	Science Sequence (List A) ³	4

Total Minimum Credits for Degree

66

¹ If a student takes HLT 110 for 2 credits, a physical education course may be used for the one credit hour difference. Three physical education courses will not fulfill this requirement. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Four ADJ electives must be taken from the following list:

- ADJ 105 Juvenile Justice System
- ADJ 107 Survey of Criminology
- ADJ 130 Introduction to Criminal Law
- ADJ 164 Case Studies in Murder and Violent Crimes
- ADJ 186 Forensic Psychology: Criminal Investigative Analysis
- ADJ 227 Constitutional Law for Justice Personnel
- ADJ 232 Domestic Violence
- ADJ 234 Terrorism & Counter Terrorism
- ADJ 236 Principles of Criminal Investigation
- ADJ 237* Advanced Criminal Investigation

³ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Administrative Management Technology

Associate of Applied Science 298

Purpose: This curriculum is designed for graduates to be qualified for jobs in administrative office management and administrative support supervision.

A specialization is also available in medical administrative management.

Program Objectives: Employment opportunities include: general office manager, billing and/or credit manager, executive assistant, and account managers.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs. (ACBSP)

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Administrative Management Technology program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	AST	101	Keyboarding I	3
___	AST	107	Editing/Proofreading Skills	3
___	AST	154	Voice Recognition Applications	1
___	ENG	111*	College Composition I	3
___	MKT	100	Principles of Marketing	3
___	MTH	120*	Introduction to Mathematics	3
___	SDV	101	Orientation to AMT/HIM (Fall Only) (or SDV 100)	1

Spring Semester

___	ACC	211*	Principles of Accounting I	4
___	AST	102*	Keyboarding II (Spring Only)	3
___	AST	113*	Keyboarding for Speed and Accuracy	1
___	AST	141*	Word Processing I (Microsoft® Word)	3
___	BUS	241	Business Law	3
___	CST	105	Oral Communication	3

SECOND YEAR

Fall Semester

___	AST	232*	Microcomputer Office Applications	3
___	AST	238*	Word Processing Advanced Operations	3
___	AST	243*	Office Administration I (Fall Only)	3
___	BUS	200	Principles of Management	3
___	BUS	205	Human Resource Management	3

Spring Semester

___	AST	205*	Business Communications	3
___	AST	236*	Specialized Software Applications (Spring Only)	3
___	AST	244*	Office Administration II (Spring Only)	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	PSY	120	Human Relations	3
___	___	___	Humanities/Fine Arts (List A) ²	3

Total Minimum Credits for Degree

65

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.

Administrative Management Technology

Medical Administrative Management Specialization

Associate of Applied Science 298-03

Purpose: This curriculum is designed for graduates to be qualified for jobs in medical office management and medical administrative support supervision.

Program Objectives: Employment opportunities include: physician practice manager, hospital office manager, and health information office manager.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs. (ACBSP)

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Administrative Management Technology program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	AST	101	Keyboarding I	3
___	AST	154	Voice Recognition Applications	1
___	ENG	111*	College Composition I	3
___	HLT	143*	Medical Terminology I	3
___	MKT	100	Principles of Marketing	3
___	MTH	120*	Introduction to Mathematics	3
___	SDV	101	Orientation to AMT/HIM (Fall Only) (or SDV 100)	1

Spring Semester

___	AST	102*	Keyboarding II (Spring Only)	3
___	AST	113*	Keyboarding for Speed Accuracy	1
___	AST	141*	Word Processing I (Microsoft® Word)	3
___	CST	105	Oral Communications	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	HLT	144*	Medical Terminology II	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

SECOND YEAR

Fall Semester

___	ACC	211*	Principles of Accounting I	4
___	AST	238*	Word Processing Advanced Operations	3
___	AST	243*	Office Administration I (Fall Only)	3
___	BUS	205	Human Resource Management	3
___	BUS	241	Business Law	3

Spring Semester

___	AST	205*	Business Communications	3
___	AST	232*	Microcomputer Office Applications	3
___	AST	244*	Office Administration II (Spring Only)	3
___	BUS	200	Principles of Management	3
___	PSY	120	Human Relations	3

Total Minimum Credits for Degree

65

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Architectural Civil Engineering Technology

Associate of Applied Science 895

Purpose: This curriculum is designed to prepare qualified technicians for career opportunities in the architecture and civil engineering technology.

A specialization is also available in geographic information systems.

Program Objectives: The architectural/civil technician serves as a liaison between the craftsperson and the technologist or engineer. Opportunities include employment with architects, consulting engineers, general contractors, land surveyors, and government organizations such as the Virginia Department of Transportation (VDOT), Western Virginia Water Authority, and the Department of Environmental Quality (DEQ). Opportunities also exist in construction-related manufacturing fields such as prefabricated buildings, steel fabrication, and precast/prestressed concrete production.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Architectural/Civil Engineering program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	ARC	100	Introduction to Architecture	3
___	DRF	201*	Computer Aided Drafting and Design I	3
___	EGR	216*	Computer Methods in Engineering and Technology	3
___	GEO	200	Intro to Physical Geography	3
___	MTH	115*	Technical Mathematics I	3
___	SDV	101	Orientation to Engineering (or SDV 100)	1

Spring Semester

___	ARC	133	Construction Methodology and Procedures I	3
___	DRF	128*	Geometric Dimensioning and Tolerancing	3
___	DRF	202*	Computer Aided Drafting and Design II	3
___	ENG	111*	College Composition I	3
___	MEC	131*	Mechanics I - Statics for Engineering Technology	3
___	MTH	116*	Technical Mathematics II	3

SECOND YEAR

Fall Semester

___	ARC	221*	Architectural CAD Applications Software I	3
___	GIS	200*	Geographical Information Systems I	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	MEC	132*	Mechanics II - Strength of Materials for Engineering Technology	3
___	PHY	201*	General College Physics I	4

Spring Semester

___	CIV	135	Construction Management and Estimating	3
___	CIV	171*	Surveying I	3
___	CST	100	Principles of Public Speaking (or CST 105)	3
___	GIS	201*	Geographical Information Systems II	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	___	___	Social Science Elective (List B) ²	3

Total Minimum Credits for Degree

66

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Architectural Civil Engineering Technology

Geographic Information Systems Specialization

Associate of

Applied

Science

895-01

Purpose: This curriculum is designed to prepare qualified technicians for career opportunities in the geospatial areas of architectural and civil engineering.

Program Objectives: The Geospatial Engineering Technician collects, creates, and edits data in a Geospatial Information System to create maps and update geographic databases. Opportunities include employment with consulting engineers and municipal GIS Departments, such as Western Virginia Water Authority and Roanoke City.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist.

Contact the Architectural/Civil Engineering program head as listed on program webpage.

FIRST YEAR**Fall Semester**

___	DRF	201*	Computer Aided Drafting and Design I	3
___	EGR	216*	Computer Methods in Engineering and Technology	3
___	ENG	111*	College Composition I	3
___	GEO	200	Intro to Physical Geography	3
___	MTH	115*	Technical Mathematics I	3
___	SDV	101	Orientation to Engineering (or SDV 100)	1

Spring Semester

___	DRF	202*	Computer Aided Drafting and Design II	3
___	___	___	Health or Physical Education (HLT/PED) ¹	2
___	ITP	136*	C# Programming I	4
___	MEC	131*	Mechanics I - Statics for Engineering Technology	3
___	MTH	116*	Technical Mathematics II	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

SECOND YEAR**Fall Semester**

___	ARC	221*	Architectural CAD Applications Software I	3
___	GIS	200*	Geographical Information Systems I	3
___	GIS	210*	Understanding Geographic Data	3
___	MEC	132*	Mechanics II - Strength of Materials for Engineering Technology	3
___	PHY	201*	General College Physics I	4

Spring Semester

___	CIV	171*	Surveying I	3
___	CST	100	Principles of Public Speaking (or CST 105)	3
___	GIS	201*	Geographical Information Systems II	3
___	GIS	205*	GIS 3-Dimensional Analysis	3
___	___	___	Social Science Elective (List B) ²	3

Total Minimum Credits for Degree**65**

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of

Applied

Science

511

Purpose: This curriculum is designed to educate and prepare those wanting to work in the visual communications disciplines, such as graphic design and advertising, as well as the areas of digital prepress and web publishing.

Program Objectives: Employment opportunities include advertising design, printing, illustration, photography, digital illustration, digital prepress, graphic design, and Web page design.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: A satisfactory aptitude for drawing is not required. Students must possess computer literacy in order to be successful in this program.

Students will prepare portfolios for their job search.

Due to prerequisite requirements, ART classes should be taken in a **specific** order. Students should work with a counselor or faculty advisor to determine their course plan if the suggested schedule is not followed.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Communication Design program head as listed on program webpage.

Communication Design

FIRST YEAR

Fall Semester

___	ART	121	Drawing I	3
___	ART	131	Fundamentals of Design I	3
___	ART	140	Introduction to Graphic Skills	3
___	ART	250	History of Design	3
___	SDV	100	College Success Skills	1

Spring Semester

___	ART	122*	Drawing II	3
___	ART	132*	Fundamentals of Design II	3
___	ART	141*	Typography I	3
___	ENG	111*	College Composition I	3
___	PHT	101	Photography I	3

Summer Semester

___	___	___	Health or Physical Education (HLT/PED) ¹	2
___	MTH	120*	Introduction to Mathematics	3
___	___	___	Social Science Elective (List A) ²	3

SECOND YEAR

Fall Semester

___	ART	221*	Drawing III (Figure Drawing)	3
___	ART	243*	Watercolor I	3
___	ART	251*	Communication Design I	3
___	ART	282*	Graphic Techniques	3
___	ART	283*	Computer Graphics I (Photoshop®)	3

Spring Semester

___	ART	247*	Painting Technique for Illustrators	3
___	ART	252*	Communication Design II	3
___	ART	284*	Computer Graphics II (Digital Illus)	3
___	ART	287*	Portfolio and Resume Preparation	3
___	CST	105	Oral Communication	3

Total Minimum Credits for Degree

66

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of Applied Science 242

Purpose: This curriculum is designed to provide students with the knowledge and basic skills required to be successful in the culinary industry.

Program Objectives: Graduates satisfy the American Culinary Federation eligibility requirements to test for both the Certified Culinarian (CC) and Certified Pastry Culinarian (CPC) designations.

This curriculum prepares graduates to enter the workforce at differing levels in the following positions: baker, broiler cook, expeditor, fry/sauté cook, pantry cook, pastry cook, soup and sauce cook, sous chef, and vegetable cook. With successful work experience, students will be able to become head cooks and chefs.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: Dual enrollment opportunities with secondary school programs in the college's service area are available.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Culinary Arts program head as listed on program webpage.

Al Pollard Culinary Arts Program

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	HRI	106	Principles of Culinary Arts I	3
___	HRI	154	Principles of Hospitality Management	3
___	HRI	158	Sanitation and Safety	3
___	MTH	120*	Introduction to Mathematics	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	HRI	128*	Principles of Baking	3
___	HRI	145*	Garde Manger	3
___	HRI	215	Food Purchasing	3
___	HRI	219*	Stock, Soup and Sauce Preparation	3
___	___	___	Humanities/Fine Arts Elective (List A) ¹	3

Summer Semester

___	ITE	115	Intro to Computer Applications and Concepts	3
___	___	___	Social Science Elective (List A) ¹	3

SECOND YEAR

Fall Semester

___	HRI	107*	Principles of Culinary Arts II	3
___	HRI	119	Applied Nutrition for Food Service ³	3
___	HRI	220*	Meat, Seafood and Poultry Preparation	3
___	HRI	225	Menu Planning and Dining Room Service	3
___	HRI	251*	Food and Beverage Cost Control I	3

Spring Semester

___	ACC	110	Introduction to Computerized Accounting	1
___	BUS	165*	Small Business Management	3
___	HRI	206*	International Cuisine	3
___	HRI	207*	American Regional Cuisine	3
___	HRI	290*	Coordinated Internship ²	2
___	SDV	106	Preparation for Employment ²	1

Total Minimum Credits for Degree

65

¹ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

² HRI 290 and SDV 106 must be taken during the same semester.

³ Health and wellness are emphasized throughout the culinary program, but specifically in HRI 119 Application of Nutrition for Food Service.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

NOTE: Fall and Spring course sequence are only taught in their respective semesters.

Al Pollard Culinary Arts Program

Program Requirements

To successfully complete the laboratory components of the program, the student must be able to perform all of the essential functions of a culinarian:

1. Communicate satisfactorily with clients, supervisors, peers, and the culinary team, which includes a diverse group of people.
2. See and hear adequately to be able to react to the varied culinary environments, such as receive and interpret various equipment signals.
3. See adequately to read equipment gauges in order to correctly interpret displayed data.
4. Be prepared to attend and stand/walk during class and/or labs during day and/or evenings lasting from 3 to 9 hours in length.
5. Walk rapidly for a prolonged period from one area to another. Work with sense of urgency.
6. Bend or squat frequently.
7. Assist in lifting or moving equipment, cooking pots and pans and food ingredients.
8. Demonstrate adequate eye/hand coordination for dexterity in manipulation of equipment and utensils.
9. Use hands for grasping, pushing, pulling and fine manipulation.
10. Work with arms fully extended overhead for short periods
11. Differentiate the color spectrum for proper preparation and presentation of prepared dishes.
12. Possess the visual acuity to correctly read handwritten requisitions, orders, receiving reports, recipes, and provide safety for clients.
13. Must be able to lift a minimum of 50 pounds.
14. Be able to multi-task, as well as, keep a "level head" when exposed to highly stressful and demanding situations in lab and internship settings.
15. Work in close quarters in close proximity to a diverse group of people.
16. Withstand high-temperature environment for prolonged periods of time.
17. Work as a member of a cohesive team.

Despite the foregoing, a qualified person with a disability who can perform these essential functions with reasonable accommodations will be considered for admission along with other qualified applicants.

Program Notes

Dual enrollment opportunities with secondary school programs in the college's service area are available.

Associate of

Applied

Science

118

Purpose: The curriculum is designed to prepare students as primary preventive oral health professionals licensed to practice dental hygiene. Upon successful completion of the program, graduates will be eligible to take national, regional, and state board examinations leading to licensure as a registered dental hygienist (RDH).

Program Objectives: A dental hygienist may practice in dental offices and dental clinics; federal, state, and local health departments; hospitals and nursing homes/home health organizations; school districts or departments of education; educational programs for dental, dental hygiene, and dental assisting students; correctional facilities; private and public facilities for pediatric, geriatric, and other individuals/groups with special needs; or health maintenance organizations/managed care organizations.

Developmental Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Applicants must receive an English 111 placement test recommendation or have successfully completed all developmental English requirements.

Applicants who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Dental Hygiene program head as listed on program webpage.

Dental Hygiene

PRIOR TO FIRST YEAR

Fall Semester

___	BIO	141	Human Anatomy & Physiology I	4
___	BIO	142	Human Anatomy & Physiology II	4
___	ENG	111	College Composition I	3

FIRST YEAR

Fall Semester

___	DNH	111	Oral Anatomy	2
___	DNH	115	Histology/Head and Neck Anatomy	3
___	DNH	120	Management of Emergencies	2
___	DNH	130	Oral Radiography for the Dental Hygienist	3
___	DNH	141	Dental Hygiene I	5
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	DNH	142*	Dental Hygiene II	5
___	DNH	145*	General and Oral Pathology	2
___	DNH	146	Periodontics for the Dental Hygienist	2
___	DNH	216	Pharmacology	2
___	BIO	205*	General Microbiology	4

Summer Semester

___	DNH	150	Nutrition ¹	2
___	DNH	190	Coordinated Practice	3
___	DNH	235*	Management of Dental Pain and Anxiety	2

SECOND YEAR

Fall Semester

___	DNH	214	Practical Materials for Dental Hygiene	2
___	DNH	226	Public Health Dental Hygiene I	2
___	DNH	244	Dental Hygiene IV	5
___	PSY	230*	Developmental Psychology	3

Spring Semester

___	DNH	227*	Public Health Dental Hygiene II	1
___	DNH	230	Office Practice and Ethics	1
___	DNH	245*	Dental Hygiene V	5
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Total Minimum Credits for Degree

71

¹ Health and wellness are emphasized throughout the dental hygiene program, but specifically in DNH 150 Nutrition.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

*This course has a requisite. Requisites for all courses are listed in the course description

Dental Hygiene

Admissions Requirements: Applicants to the Dental Hygiene program must hold a high school diploma or GED and meet the developmental requirements listed to the left. Additionally, applicants must complete the prerequisites listed below with a grade of "C" or higher by the end of the spring semester prior to beginning the program:

1. One unit of high school or college biology
2. One unit of high school or college chemistry
3. Completion of BIO 141-142, Anatomy and Physiology I-II
4. Completion of Algebra I-II or MTE 1-9

The applicant's high school or college (if applicable) cumulative grade point average (GPA) must be at least 2.5. College GPA is based on at least 12 credit hours in a 12-month time frame. The GPA is determined at the end of the fall semester prior to admission. Priority consideration will be given to applicants with a cumulative high school and/or college grade point average of 3.0 or above.

All qualified applicants must take the HOBET.

Admission Procedures: Admission to the dental hygiene program is offered to qualified applicants on an annual basis at the Roanoke campus. Admission to the VWCC-DCC joint venture distance program site in Danville is offered to qualified applicants on a biennial basis during odd-numbered years. Admission to the VWCC-Lord Fairfax joint venture distance program site in Middletown is offered on a biennial basis during even-numbered years. Deadline for submitting complete application materials is **February 15** for the upcoming academic year. Applicants should be aware that meeting the curriculum admission standards does not guarantee program admission. Applicants will be notified in writing of the action taken by the Dental Hygiene Admissions Committee in May. Students interested in this program should consult the VWCC Dental Hygiene Program page, VWCC policy on Infectious Disease Status, Essential Dental Hygiene Functions, Clinical Environment, Student Responsibilities, Student Retention and Readmission Policy. The page can be accessed through the VWCC website (<http://www.virginiawestern.edu/academics/programs/aasdegrees.php>).

Program Notes: This program has been accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the United States Department of Education.

Individuals who have a felony or misdemeanor conviction may not be eligible for licensure. This decision is made by the Virginia Board of Dentistry. For questions regarding this issue, call Virginia Board of Dentistry (804) 367-4538.

Students who have begun a dental hygiene program at an accredited institution other than Virginia Western may be considered for admission by transfer if there is class availability and if certain conditions are met. Student interested in transfer should consult the VWCC Dental Hygiene program page for transfer criteria.

Retention Policy: Satisfactory progress is demonstrated by achieving a grade of "C" or better in required Dental Hygiene and Natural Science courses. Students must satisfactorily complete BIO 205 with a grade of "C" or above before progressing to the second year of the program. Because curricular components build upon each other over the five semesters, students must complete required Dental Hygiene courses in sequence.

Associate of

Applied

Science

636

Purpose: This curriculum is designed to enable graduates to qualify as directors, assistant directors, teachers, assistant teachers, or as classroom aides in programs for young children. The curriculum has been established to provide competency 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. Students who are interested in working with special needs children should consult with the Early Childhood Development faculty.

Program Objectives: Employment opportunities include positions in independent childcare centers and kindergartens, family day care homes, preschool programs, centers for children with special needs, residential childcare facilities and industry associated centers. In addition, this program qualifies graduates for positions as elementary school or head start teacher assistants.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: Admission to CHD 165 is selective and must be approved by the program head. Eligibility is based on the following criteria: a 2.0 minimum GPA, completion of course prerequisites, any relevant internship site requirements and current documentation of a negative tuberculosis screening.

Each student is responsible for transportation to and from field sites used for laboratory experience. Students are also responsible for any fees or costs associated with background checks in field site placements.

Although this program is not designed for transfer, agreements with specific institutions may exist.

Contact the Early Childhood Development program head as listed on program webpage.

Early Childhood Development

FIRST YEAR

Fall Semester

___	CHD	118	Language Arts for Young Children	3
___	CHD	120	Intro to Early Childhood Education	3
___	CHD	145	Teaching Art, Music, and Movement to Children	3
___	ENG	111*	College Composition I	3
___	PSY	235*	Child Psychology	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	CHD	119*	Intro to Reading Materials	3
___	CHD	215	Models of Early Childhood Education Programs	3
___	CHD	216	Early Childhood Programs, School, and Social Change	3
___	ENG	112*	College Composition II	3
___	HLT	105	Cardiopulmonary Resuscitation (or HLT 106) ¹	1
___	HLT	135	Child Health and Nutrition (or EDU 235)	3

SECOND YEAR

Fall Semester

___	CHD	146	Math, Science, and Social Studies for Children	3
___	CHD	165*	Observation and Participation in Early Childhood/Primary Settings	3
___	CHD	210	Introduction to Exceptional Children	3
___	CHD	270	Administration of Childcare Programs	3
___	MTH	151*	Mathematics for the Liberal Arts I (or Lab Science)	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Spring Semester

___	CHD	166	Infant and Toddler Programs	3
___	CHD	205	Guiding the Behavior of Children	3
___	CHD	265*	Advanced Observation and Participation in Early Childhood/Primary Settings	3
___	CHD	298*	Seminar and Project in Portfolio Development	1
___	CST	100	Principles of Public Speaking	3
___	SOC	215	Sociology of the Family (or Social Science Elective [List B]) ²	3

Total Minimum Credits for Degree

66

¹ The requirement for first aid training may be met by a Red Cross Certificate in basic first aid and infant/child and adult CPR.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

³ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Electrical Engineering Technology

Associate of

Applied

Science

731

Purpose: This curriculum is designed to provide graduates with the theoretical foundation and hands-on practice in a wide range of subjects, including electronic circuits and devices, computer hardware and software, power and machines, programmable logic controllers, computer networks, and telecommunications.

Program Objectives: Employment opportunities include positions as electrical engineering technicians who assist in identifying and solving problems with electrical equipment and systems found in industrial or commercial plants and laboratories. Job tasks may include evaluating performance of developmental parts; electrical component assembly; calibrating, maintaining and repair of electrical instruments; preparing technical reports; and analyzing test information to resolve design-related problems.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Electrical Engineering program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	ETR	113*	DC and AC Fundamentals I	4
___	MTH	115*	Technical Mathematics I	3
___	SDV	101	Orientation to Engineering (or SDV 100)	1
___	TEL	150	Internetworking I	4

Spring Semester

___	EGR	216*	Computer Methods in Engineering and Technology	3
___	ETR	111	Electronic Mathematics	3
___	ETR	114*	DC and AC Fundamentals II	4
___	ETR	280*	Intro to Digital Logic Circuits and Computers	4
___	TEL	151*	Internetworking II	4

SECOND YEAR

Fall Semester

___	ETR	250*	Solid State Circuits	4
___	___	___	Health or Physical Education (HLT/PED) ¹	2
___	PHY	201*	General College Physics I	4
___	ELE	226*	Electrical Power and Control Systems	3
___	___	___	Social Science Elective (List A) ¹	3

Spring Semester

___	ELE	239*	Programmable Controllers	3
___	ELE	298*	Seminar and Project in Electrical Engineering Technology	3
___	ETR	285	Fundamentals of Microcomputer Repair	4
___	___	___	Humanities/Fine Arts Elective (List A) ¹	3
___	___	___	Technical Elective ²	3

Total Minimum Credits for Degree

65

¹ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

² Students should choose from DRF 201, GIS 200, PHY 202, or TEL 250.

³ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of Applied Science 480

Purpose: This curriculum prepares students for entry-level positions in the helping fields. Through courses and a field placement in agencies, students develop skills in working with people with physical and psychiatric disabilities, adolescents, the aged, the substance abuser, and the child or adult in crisis.

Program Objectives: Employment opportunities for graduates in Human Services include staff positions in hospitals, mental health clinics, residential facilities and community service agencies. Graduates may transfer to a four-year college or university for bachelor degrees in fields such as social work, psychology, and gerontology.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: MEN 101 is only offered in the fall semester and is a prerequisite for many classes. Students entering the Human Services Program should make this their first class selection.

Admission to Internship: Admission to MEN 290 (Coordinated Internship) is selective and must be approved by the Internship Coordinator. Eligibility is based upon the following criteria: minimum GPA of 2.0, completion of course prerequisites, faculty recommendations, expected graduation date, and any relevant internship site requirements. Internship students that do not meet the professional standards of the Human Services Program, and/or the participating clinical agency may be withdrawn from the internship.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Human Services program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	MEN	100*	Introduction to Mental Health (Fall Only)	3
___	MEN	101*	Mental Health Skill Training I (Fall Only)	3
___	PSY	200*	Principles of Psychology	3
___	PSY	220*	Introduction to Behavior Modification (Fall Only)	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	ENG	112*	College Composition II	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	MEN	102*	Mental Health Skill Training II (Spring Only)	3
___	MEN	225*	Counseling Therapy (Spring Only)	3
___	PSY	215*	Abnormal Psychology	3
___	PSY	___	Psychology Elective ²	3

SECOND YEAR

Fall Semester

___	BIO	101	General Biology I	4
___	MEN	221*	Group Process I (Fall Only)	3
___	MTH	157*	Elementary Statistics	3
___	SOC	200	Principles of Sociology	3
___	___	___	Humanities/Fine Arts Elective (List A) ³	3

Spring Semester

___	BIO	102*	General Biology II	4
___	CST	100	Principles of Public Speaking	3
___	ITE	115	Introduction to Computer Applications and Concepts	3
___	MEN	290*	Coordinated Internship	5
___	HMS	___	Human Services Elective ⁵	3

Total Minimum Credits for Degree

66

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Select one of the following: PSY 230 or PSY 235.

³ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

⁴ Select one of the following: HMS 236, HMS 251, HMS 280, or HMS 226.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of

Applied

Science

299

Purpose: This curriculum is designed to prepare students for entry-level positions in Information Technology fields, and to update the technical knowledge of returning professionals.

Program Objectives: Employment opportunities include Database and Program Developer, Mobile Device Developer, and Programmer.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs. (ACBSP)

Students are required to select one of the following concentrations: Database and Program Developer, Network & Security Administration, Smartphone and Tablet with GIS Developer, or Web Programmer. Students should coordinate their concentration course selections with their faculty advisors.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Information Technology program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	ITD	110	Web Page Design I	3
___	ITE	115	Intro to Computer Applications and Concepts	3
___	ITN	109	Internet and Network Foundation	3
___	ITP	100	Software Design	3
___	SDV	100	College Success Skills	1

Spring Semester

___	ACC	211*	Principles of Accounting I	4
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	___	___	Humanities/Fine Arts (List A) ²	3
___	ITD	130	Database Fundamentals	3
___	ITP	120*	Java Programming I (or ITP 136*)	4
___	MTH	120*	Introduction to Mathematics	3

SECOND YEAR

Fall Semester

___	BUS	116	Entrepreneurship	3
___	ITD	250*	Database Architecture and Administration	3
___	ITP	140*	Client Side Scripting	3
___	ITP	170*	Project Management	3
___	ITP	220*	Java Programming II (or ITP 137)	4

Spring Semester

___	BUS	100	Introduction to Business	3
___	CST	100	Principles of Public Speaking	3
___	ECO	201	Principles of Macroeconomics (or ECO 202)	3
___	ITP	225*	Web Scripting Languages	3
___	ITP	246*	Java - Server Side Programming (or ITP 226)	4

Total Minimum Credits for Degree

66

¹ Consult Health courses in the Description of Courses for selection of an approved course. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of

Applied

Science

299

Purpose: This curriculum is designed to prepare students for entry-level positions in Information Technology fields, and to update the technical knowledge of returning professionals.

Program Objectives: Employment opportunities include Network Security Administration, System Administration, Network Technician, Desktop Support Technician, and Security Analyst.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs. (ACBSP)

Students are required to select one of the following concentrations: Database and Program Developer, Network & Security Administration, Smartphone and Tablet with GIS Developer, or Web Programmer. Students should coordinate their concentration course selections with their faculty advisors.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Information Technology program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	ITD	110	Web Page Design I	3
___	ITN	109	Internet and Network Foundation	3
___	ITN	110*	Client Operating System (Windows 8)	3
___	ITP	100	Software Design	3
___	SDV	100	College Success Skills	1

Spring Semester

___	CST	100	Principles of Public Speaking	3
___	___	___	Humanities/Fine Arts (List A) ²	3
___	ITD	130	Database Fundamentals	3
___	ITE	115	Intro to Computer Applications and Concepts	3
___	ITN	111*	Server Administration (Server 2012)	4
___	MTH	120*	Introduction to Mathematics	3

SECOND YEAR

Fall Semester

___	BUS	100	Introduction to Business	3
___	BUS	116	Entrepreneurship	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	ITN	112*	Network Infrastructure (Server 2012)	3
___	ITN	260	Network Security Basics	3
___	ITP	170*	Project Management	3

Spring Semester

___	ACC	211*	Principles of Accounting I	4
___	ECO	201	Principles of Macroeconomics (or ECO 202)	3
___	ITN	113*	Active Directory (Server 2012)	4
___	TEL	151*	Internetworking II	4

Total Minimum Credits for Degree

66

¹ Consult Health courses in the Description of Courses for selection of an approved course. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of

Applied

Science

299

Purpose: This curriculum is designed to prepare students for entry-level positions in Information Technology fields, and to update the technical knowledge of returning professionals.

Program Objectives: Employment opportunities include Smartphone and Tablet with GIS Developer and Programmer.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Students are required to select one of the following concentrations: Database and Program Developer, Network & Security Administration, Smartphone and Tablet with GIS Developer, or Web Programmer. Students should coordinate their concentration course selections with their faculty advisors.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Information Technology program head as listed on program webpage.

FIRST YEAR**Fall Semester**

___	ENG	111*	College Composition I	3
___	ITD	110	Web Page Design I	3
___	ITE	115	Intro to Computer Applications and Concepts	3
___	ITN	109	Internet and Network Foundation	3
___	ITP	100	Software Design	3
___	SDV	100	College Success Skills	1

Spring Semester

___	BUS	100	Introduction to Business	3
___	CST	100	Principles of Public Speaking	3
___	ITD	130	Database Fundamentals	3
___	ITP	240*	Server Side Programming	4
___	MTH	120*	Introduction to Mathematics	3

SECOND YEAR**Fall Semester**

___	BUS	116	Entrepreneurship	3
___	GIS	200*	Geographical Information Systems I	3
___	ITP	140*	Client Side Scripting	3
___	ITP	170*	Project Management	3
___	ITP	137	Programming IOS Devices	4

Spring Semester

___	ACC	211*	Principles of Accounting I	4
___	ECO	201	Principles of Macroeconomics (or ECO 202)	3
___	GIS	201*	Geographical Information Systems II	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	ITP	226*	Mobile Java Android Development	4

Total Minimum Credits for Degree**66**

¹ Consult Health courses in the Description of Courses for selection of an approved course. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a prerequisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of

Applied

Science

299

Purpose: This curriculum is designed to prepare students for entry-level positions in Information Technology fields, and to update the technical knowledge of returning professionals.

Program Objectives: Employment opportunities include entry level positions as Internet Application Developers, Web Programmers, and Web Designers.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Students are required to select one of the following concentrations: Database and Program Developer, Network & Security Administration, Smartphone and Tablet with GIS Developer, or Web Programmer. Students should coordinate their concentration course selections with their faculty advisors.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Information Technology program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	ITD	110	Web Page Design I	3
___	ITD	112*	Designing Web Page Graphics	3
___	ITE	115	Intro to Computer Applications and Concepts	3
___	ITN	109	Internet and Network Foundation	3
___	ITP	100	Software Design	3
___	SDV	100	College Success Skills	1

Spring Semester

___	CST	100	Principles of Public Speaking	3
___	ECO	201	Principles of Macroeconomics (or ECO 202)	3
___	ENG	111*	College Composition I	3
___	ITD	130	Database Fundamentals	3
___	ITD	210*	Web Page Design II	3
___	MTH	120*	Introduction to Mathematics	3

SECOND YEAR

Fall Semester

___	BUS	100	Introduction to Business	3
___	BUS	116	Entrepreneurship	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	ITD	115	Web Page Design and Site Management	3
___	ITP	140*	Client Side Scripting	3
___	ITP	170*	Project Management	3

Spring Semester

___	ACC	211*	Principles of Accounting I	4
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	ITD	120*	Design Concepts for Mobile Applications	3
___	ITD	220*	E-Commerce Administration	3
___	ITP	225*	Web Scripting Languages	3

Total Minimum Credits for Degree

66

¹ Consult Health courses in the Description of Courses for selection of an approved course. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of

Applied

Science

212

Purpose: This curriculum is designed for individuals who seek management positions in business and industry.

Specializations are available in marketing and human resource management.

Program Objectives: Employment opportunities include management trainee, supervisor, real estate sales, banking, finance, retail merchandising, production operations, purchasing agent, sales management, and other related business and industry occupations.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs. (ACBSP)

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Management program head as listed on program webpage.

FIRST YEAR**Fall Semester**

___	ACC	211*	Principles of Accounting I	4
___	BUS	100	Introduction to Business	3
___	ENG	111*	College Composition I	3
___	ITE	115	Introduction to Computer Applications and Concepts	3
___	MTH	120*	Intro to Mathematics (or MTH 163)	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	ACC	212*	Principles of Accounting II	4
___	BUS	125*	Applied Business Mathematics (or MTH 271)	3
___	BUS	165*	Small Business Management (or BUS 111)	3
___	CST	105	Oral Communications (or CST 100)	3
___	MKT	100	Principles of Marketing	3
___	___	___	Health or Physical Education (HLT/PED) ¹	2

SECOND YEAR**Fall Semester**

___	BUS	200	Principles of Management	3
___	BUS	205	Human Resource Management	3
___	BUS	225*	Applied Business Statistics	3
___	BUS	241	Business Law I	3
___	ITE	140	Spreadsheet Software	3

Spring Semester

___	AST	205*	Business Communications	3
___	BUS	202*	Applied Management Principles (Spring Only)	3
___	ECO	201	Principles of Macroeconomics (or ECO 202)	3
___	FIN	215*	Financial Management	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Total Minimum Credits for Degree**65**

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of

Applied

Science

212-07

Purpose: This curriculum is designed for individuals who are seeking initial employment in an entry-level human resource position and those presently in business who are seeking promotions.

Program Objectives: Employment opportunities include entry-level human resource assistant, management trainee and supervisor.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs. (ACBSP)

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Management program head as listed on program webpage.

Management: Human Resource Management Specialization

FIRST YEAR

Fall Semester

___	ACC	211*	Principles of Accounting I	4
___	BUS	100	Introduction to Business	3
___	ENG	111*	College Composition I	3
___	ITE	115	Intro to Computer Applications and Concepts	3
___	SDV	100	College Success Skills (or SDV 108)	1
___	___	___	Health or Physical Education (HLT/PED) ¹	1

Spring Semester

___	ACC	110	Introduction to Computerized Accounting	1
___	ACC	212*	Principles of Accounting II	4
___	BUS	111	Principles of Supervision I	3
___	BUS	125*	Applied Business Mathematics (or MTH 271)	3
___	MKT	100	Principles of Marketing	3
___	MTH	120*	Introduction to Mathematics (or MTH 163)	3

SECOND YEAR

Fall Semester

___	ACC	124	Payroll Accounting	3
___	BUS	205	Human Resource Management	3
___	BUS	225*	Applied Business Statistics	3
___	BUS	241	Business Law I	3
___	ECO	201	Principles of Macroeconomics (or ECO 202)	3

Spring Semester

___	AST	205*	Business Communications	3
___	BUS	202*	Applied Management Principles (Spring Only)	3
___	BUS	285*	Current Issues in Management (Spring Only)	3
___	CST	105	Oral Communication (or CST 100)	3
___	FIN	215*	Financial Management	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Total Minimum Credits for Degree

65

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Management: Marketing Specialization

Associate of

Applied

Science

212-05

Purpose: This curriculum is designed for students who are seeking employment in merchandising and marketing occupations upon graduation.

Program Objectives: Employment opportunities include positions in the marketing field such as: manager/ trainee, assistant manager, department manager, sales supervisor, customer service representatives, display apprentice/trainee, advertising trainee, retail store owner/manager and media buyer.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: This program is accredited by the Accreditation Council for Business Schools and Programs. (ACBSP)

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Management program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	ACC	211*	Principles of Accounting I	4
___	BUS	100	Introduction to Business	3
___	ENG	111*	College Composition I	3
___	ITE	115	Intro to Computer Applications and Concepts	3
___	MTH	120*	Introduction to Mathematics (or MTH 163)	3
___	SDV	100	College Success Skills (or SDV 108)	1
___	___	___	Health or Physical Education (HLT/PED) ¹	1

Spring Semester

___	ACC	212*	Principles of Accounting II	4
___	AST	205*	Business Communications	3
___	BUS	125*	Applied Business Mathematics (or MTH 271)	3
___	BUS	165*	Small Business Management (or BUS 111)	3
___	MKT	100	Principles of Marketing	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1

SECOND YEAR

Fall Semester

___	BUS	225*	Applied Business Statistics	3
___	BUS	241	Business Law I	3
___	CST	105	Oral Communications (or CST 100)	3
___	MKT	110	Principles of Selling (Fall Only)	3
___	MKT	216	Retail Organizations and Management	3

Spring Semester

___	BUS	202*	Applied Management Principles (Spring Only)	3
___	ECO	201	Principles of Macroeconomics (or ECO 202)	3
___	FIN	215*	Financial Management	3
___	MKT	220	Principles of Advertising (Spring Only)	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Total Minimum Credits for Degree

65

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Mechanical Engineering Technology

Associate of

Applied

Science

956

Purpose: This curriculum is designed to prepare students for entry-level positions as mechanical engineering technicians.

Program Objectives: Graduates may seek employment as mechanical engineering technicians.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Mechanical Engineering program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	DRF	201*	Computer Aided Drafting and Design I	3
___	EGR	216*	Computer Methods in Engineering and Technology	3
___	ENG	111*	College Composition I	3
___	MEC	119	Introduction to Basic CNC and CAM	3
___	MTH	115*	Technical Mathematics I ⁴	3
___	SDV	101	Orientation to Engineering (or SDV 100)	1

Spring Semester

___	DRF	202*	Computer Aided Drafting and Design II	3
___	DRF	226*	Computer Aided Machining	3
___	MEC	113	Materials and Processes of Industry	3
___	MEC	131*	Mechanics I - Statics for Engineering Technology	3
___	MTH	116*	Technical Mathematics II ⁴	3
___	___	___	Humanities/Fine Arts Elective (List A) ¹	3

SECOND YEAR

Fall Semester

___	DRF	203*	Computer Aided Drafting and Design III	3
___	ETR	113*	DC and AC Fundamentals I	4
___	___	___	Health or Physical Education (HLT/PED) ²	1
___	MEC	132*	Mechanics II - Strength of Materials for Engineering Technology	3
___	PHY	201*	General College Physics I	4
___	___	___	Social Science Elective (List B) ¹	3

Spring Semester

___	CST	100	Principles of Public Speaking (or CST 105)	3
___	DRF	128*	Geometric Dimensioning and Tolerancing	3
___	___	___	Health or Physical Education (HLT/PED)	1
___	___	___	Social Science Elective (List A)	3
___	___	___	Technical Elective ³	3

Total Minimum Credits for Degree

65

¹ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

² Consult Health courses in the Description of Courses for selection of an approved course. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

³ A technical elective should be selected from EGR 126, EGR 206, MTH 157, PHY 202, or see advisor for additional options.

⁴ Students may substitute MTH 166 and MTH 175. See advisor for details.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Mechatronics Systems Engineering Technology

Associate of Applied Science 736

Purpose: This curriculum combines the concepts and practices of mechanical and electrical processes in order to manipulate motorized, hydraulic, and pneumatic machines to perform complex automated functions in an industrial or manufacturing setting. Students develop the skills to assemble, install, test and troubleshoot, calibrate, and service a variety of devices, products and electronic instruments. Coursework also includes collaborative projects in which students form teams with another program area to build a factory, enabling them to apply their skills and knowledge to a simulated work experience.

Program Objectives: Entry-level or advanced opportunities at automated manufacturing and computer aided industrial sites. Positions include mechanical, maintenance, electrical, quality, computer, process, and manufacturing technicians. Other job titles may include electronic service technician or industrial electrician.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: Upon completion of the AAS in Mechatronics Systems Engineering Technology, students will be prepared to take the Siemens Mechatronic Systems Certification Program (SMSCP) Level II exam.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Mechatronics program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	EGR	123	Intro to Engineering Design	2
___	EGR	216*	Computer Methods in Engineering and Technology	3
___	ENG	111*	College Composition I	3
___	ETR	113*	DC and AC Fundamentals I	4
___	MTH	115*	Technical Mathematics I	3
___	SDV	101	Orientation to Engineering (or SDV 100)	1

Spring Semester

___	EGR	105	Intro to Problem Solving in Technology	1
___	ETR	237*	Industrial Electronics I	4
___	MEC	113	Materials and Processes of Industry	3
___	MEC	131*	Mechanics I - Statics for Engineering Technology	3
___	MEC	162	Applied Hydraulics and Pneumatics	3
___	MTH	163*	Precalculus I (or MTH 166)	3

SECOND YEAR

Fall Semester

___	ETR	238*	Industrial Electronics II	4
___	IND	250*	Intro to Basic Computer Integrated Manufacturing	3
___	MEC	132*	Mechanics II - Strength of Materials	3
___	PHY	201*	General College Physics I	4
___	___	___	Social Science Elective (List A) ²	3

Spring Semester

___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	IND	230	Applied Quality Control	3
___	IND	251*	Automated Manufacturing Systems I	4
___	IND	290	Coordinated Internship II	3
___	SAF	127	Industrial Safety	2
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Total Minimum Credits for Degree

66

*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

Associate of

Applied

Science

156

Purpose: The curriculum is designed to prepare selected students to qualify as contributing members of the health team implementing direct patient care as beginning practitioners in a variety of health service facilities. At the successful completion of the program, students will be eligible to take the National Council Licensure Exam (NCLEX-RN) leading to the designation of registered nurse.

Program Objectives: Employment opportunities for the registered nurse include staff positions in hospitals, nursing homes, health departments, physicians' offices, clinics, day care centers, and home health agencies.

Developmental Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Applicants must meet the developmental requirements listed above prior to applying for admission to the AAS Nursing Program.

Applicants must receive an ENG 111 placement test recommendation or have successfully completed all developmental English requirements.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Nursing program head as listed on program webpage.

PRIOR TO FIRST YEAR

___	BIO	141	Human Anatomy & Physiology I	4
___	BIO	142	Human Anatomy & Physiology II	4

FIRST YEAR**Fall Semester**

___	HLT	141	Introduction to Medical Terminology ⁴	1
___	___	___	Health or Physical Education (HLT/PED) ^{1,3}	1
___	NUR	135	Drug Dosage Calculations ²	2
___	SDV	100	College Success Skills	1
___	NUR	111	Nursing I	7
___	NUR	226	Health Assessment	2

Spring Semester

___	BIO	205*	General Microbiology	4
___	NUR	112	Nursing II	8
___	NUR	230	Pharmacology	3

SECOND YEAR**Fall Semester**

___	ENG	111*	College Composition I	3
___	NUR	211	Second Level Nursing I	7
___	NUR	245	Maternal/Newborn Nursing	3
___	NUR	247	Psychiatric/Mental Health Nursing	3

Spring Semester

___	PSY	230*	Developmental Psychology	3
___	NUR	212	Second Level Nursing II	7
___	NUR	246	Parent/Child Nursing	3
___	___	___	Humanities/Fine Arts Elective (List A) ¹	3

Total Minimum Credits for Degree**69**

¹ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

²It is strongly recommended that the student take NUR 135 the Summer Semester prior to NUR 111.

³HLT 105 or CPR certification can be used to satisfy this requirement.

⁴HLT 143 cannot substitute for HLT 141 unless the course sequence of both HLT 143 and HLT 144 have been completed.

Support courses (non-NUR courses) may be taken prior to entry into the program.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Nursing

Admission Procedures: Applicants to the nursing program are strongly encouraged to meet with the Health Careers Information Specialist prior to enrollment in any course included in the nursing program or in any course to correct an academic deficiency. Please note: Receipt of completed academic transcripts and results of placement evaluations are required prior to this meeting.

2. The nursing program accepts new students each fall. Applications must be completed no later than **March 1**. The complete application includes: an application to the college, official transcripts from all colleges attended (transcripts from VWCC or other Virginia community colleges are not required), official transcripts showing completion of a high school diploma or records showing completion of GED with scores, results of the nursing entrance test, TEAS V, which is taken at the student's expense (nonrefundable), and a current Nursing Application form. Nursing Application forms are available in the Admissions Office, The Health Professions Information Office, and on our previous page.

3. BIO 141 must be completed with a grade of "C" or better by the end of the spring semester preceding enrollment in NUR 111. BIO 142 must be completed with a "C" or better by the end of the summer session preceding enrollment in NUR 111. (BIO 141, BIO 142 and BIO 205 must be repeated if they were completed more than 5 years prior to the date of admission into the program.)

4. Applicants should be aware that meeting the curriculum admission standards does not guarantee program admission. In May, all applicants will receive a letter to notify them of their status with the program.

5. If admitted, all students must attend a mandatory nursing program orientation the summer before beginning the program.

Admission Requirements: Applicants to the Nursing Program must hold a high school diploma or GED and meet the developmental requirements listed.

1. Completion of one unit of high school Biology and Chemistry with a grade of "C" or better is required before applying to this program.
2. The applicant's cumulative high school grade point average (GPA) must be at least 2.5.
3. If the applicant has been to college, the applicant's cumulative college GPA must also be at least 2.5 based on at least 12 credit hours of college credit in a 12-month time frame. The GPA is determined at the end of the fall semester prior to admission. High school graduates and GED holders who earned less than a 2.5 GPA during high school will be considered for admission if they have generated a college GPA of 2.5 or above based on at least 12-semester college credit hours within a 12-month period.
4. Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses MTE: 1, 2, 3, 4, 5 and 6.
5. Students interested in this program should consult the VWCC Nursing Program page, VWCC policy on Infectious Disease Status, Essential Nursing Functions, Clinical Environment, Student Responsibilities, Student Retention and Readmission Policy. The page can be accessed through the VWCC website For application materials and additional program information, please see our website at <http://www.virginiawestern.edu/academics/health/nursing/index.php>.
6. Successfully complete a CPR (cardiopulmonary resuscitation) course approved by the nursing program.

a. American Heart Association "CPR for the healthcare provider"

b. American Red Cross "CPR for the Professional Rescuer"

c. HLT 105: Cardiopulmonary Resuscitation

7. Complete the required annual criminal background check (Certified Background Check) with drug screen.

Program Notes: This program is approved by the Virginia Board of Nursing.

Board of Nursing Perimeter Center 9960 Mayland Drive, Suite 300 Henrico, Virginia 23233-1463

Clinical agencies require that students have periodic background checks and drug screenings completed at the student's expense before beginning clinical rotations in the agency. A positive background check may include fingerprinting and drug screening and may deny a nursing student access to clinical agencies. Clinical facilities have the right to use a different background check than Virginia Western Community College that could affect a student's ability to participate in clinical experiences. Inability to participate in clinical rotations will disqualify the student from completing the nursing program.

Conviction of a felony, misdemeanor or any offense substantially related to the qualifications, functions and duties of a registered nurse may constitute grounds for not allowing a candidate to take the licensing exam. This decision is made by the State Board of Nursing. For questions regarding this issue, call The Virginia Board of Nursing (804) 367-4515.

Although this program is not designed for transfer, articulation agreements with four year institutions may be available. Contact the Virginia Western program head for details.

All Students must maintain a grade of "C" or better in all program required courses to remain in the program.

Students accepted into the A.A.S. Nursing Program will receive a program handbook during their mandatory orientation prior to beginning the program.

Paralegal Studies

Associate of

Applied

Science

260

Purpose: This curriculum is designed to provide an individual working under the direct supervision of an attorney with a sufficient level of knowledge and proficiency to perform tasks in meeting the needs of clients.

A paralegal will have a basic understanding of the general process of civil and criminal american law.

Program Objectives: Graduates may seek employment as a paralegal or legal assistant.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Paralegal program head as listed on program webpage.

FIRST YEAR

Fall Semester

(First year courses must be completed prior to enrolling in second year courses)

___	ENG	111*	College Composition I	3
___	ITE	115	Introduction to Computer Applications and Concepts	3
___	LGL	110	Introduction to Law and the Legal Assistant	3
___	LGL	115	Real Estate Law for Legal Assistants	3
___	LGL	117	Family Law	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	AST	205*	Business Communications	3
___	CST	105	Oral Communications (or CST 100)	3
___	LGL	125*	Legal Research ³	3
___	LGL	126*	Legal Writing ³	3
___	MTH	120*	Introduction to Mathematics	3
___	PSY	120	Human Relations	3

SECOND YEAR

Fall Semester

___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	LGL	130	Law Office Administration and Management	3
___	LGL	210*	Virginia and Federal Procedure	3
___	LGL	225*	Estate Planning and Probate	3
___	LGL	230*	Legal Transactions	3
___	LGL	235*	Legal Aspects of Business Operations	3

Spring Semester

___	LGL	215*	Torts	3
___	LGL	216*	Trial Preparation and Discovery Practice	3
___	LGL	218*	Criminal Law	3
___	LGL	238*	Bankruptcy	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Total Minimum Credits for Degree

65

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

³ LGL 125 and LGL 126 must be taken during the same semester.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

NOTE: Fall and Spring course sequence are only taught in their respective semesters.

Associate of Applied Science 113

Purpose: This curriculum is designed to prepare selected students to perform the responsibilities of an entry-level radiation therapist. The Associate of Applied Science will be required of all applicants who do not hold a degree. Upon completion, graduates will be eligible to apply to take the American Registry of Radiologic Technologists (ARRT) examination leading to certification as a registered Radiation Therapist, RT(T).

Program Objectives: Graduates may apply for employment in hospitals, cancer centers, education, management, government agencies, and marketing and research.

Developmental Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

English: Applicants must receive an ENG 111 placement test recommendation or have successfully completed all developmental English requirements.

Math: Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8, and 9.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Radiation Oncology program head as listed on program webpage.

Radiation Oncology

FIRST YEAR

Fall Semester

___	BIO	145	Human Anatomy and Physiology for the Health Science ³	4
___	___	___	Health or Physical Education (HLT/PED) ¹	2
___	HLT	143*	Medical Terminology I	3
___	ROC	110	Introduction to Radiation Oncology	2
___	ROC	115	Therapeutic Radiation Safety	1
___	ROC	142	Patient Care in Oncology	1
___	SDV	100	College Success Skills (or SDV 108)	1
___	ROC	125	Pre-Clinical Techniques	2

Spring Semester

___	ENG	111*	College Composition I	3
___	MTH	163*	Precalculus I	3
___	ROC	120*	Radiation Oncology/Pathology I	3
___	ROC	131	Clinical Clerkship I	4
___	ROC	145*	Quality Improvement	2
___	ROC	151*	Introduction to Cross-Sectional Anatomy	2

Summer Semester

___	ROC	132*	Clinical Clerkship II	5
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SECOND YEAR

Fall Semester

___	ROC	121*	Radiation Oncology/Pathology II	3
___	ROC	141*	Therapy Physics I	2
___	ROC	231*	Clinical Clerkship III	5
___	ROC	242*	Clinical Radiobiology	2
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Spring Semester

___	ROC	225*	Emerging Technology in Radiation Oncology	1
___	ROC	232*	Clinical Clerkship IV	5
___	ROC	241*	Therapy Physics II	2
___	ROC	243*	Dosimetry Planning	2
___	ROC	244*	Professional Seminar	2
___	___	___	Social Science Elective (List A) ²	3

Total Minimum Credits for Degree

68

¹ HLT 105 or CPR certification can be used to satisfy part of this requirement.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

³ Students who have completed BIO 141-142 within five years prior to the date of admission into the program may receive credit for BIO 145.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Note: Support courses (non-ROC courses) may be taken prior to entry.

Radiation Oncology

Admission Requirements: Applicants to the Radiation Oncology program must hold a high-school diploma or GED and meet the developmental requirements. Additionally, applicants must complete prerequisites listed below with a grade of “C” or higher by the end of Spring Semester prior to the beginning of the program:

- Algebra I, Algebra II, Geometry, or Developmental Mathematic Units 1-9
- Two units of high school or college biology, chemistry, or physics

Admission Procedures: The Radiation Oncology applicant is responsible for making certain that the following have been submitted in addition to a current college application by the **March 15** deadline:

- Completed program application form
- Official high school transcript
- Copy of GED scores if applicable
- Official transcripts from all colleges attended (VWCC and other Virginia community college transcripts are not necessary)
- Two (2) letters of recommendation, such as, employers or professors
- Copy of any professional licensure or certification

Note: If applying for the joint venture site at Northern Virginia Community College, applicants must complete a college application for NOVA, in addition to VWCC.

The Radiation Oncology Program is a selective admissions program requiring an application to the college as well as a separate application to the program.

The Radiation Oncology application form and additional program information can be accessed from our website at

<http://www.virginiawestern.edu/academics/health/oncology/index.php>. Application packets are also available in the Health Professions and College Admissions Office. Early application is encouraged for advising purposes.

Applicants must also take the math placement test at Virginia Western. Additional information regarding the math evaluation procedures will be mailed to applicants upon receipt of the above completed academic file.

Qualified applicants will be contacted for an interview appointment during the spring semester. Applicants considered by the Radiation Oncology Admissions Committee will be notified by mail in May regarding fall admission. If the number of qualified applicants is below the maximum enrollment for VWCC or NOVA, the application deadline may be extended for that site.

Students interested in this program should consult the VWCC Radiation Oncology Program page, VWCC Policy on Infections Disease Status, Essential Radiation Oncology Functions, Clinical Environment, Student Responsibilities, and Student Retention and Readmission Policy. These pages can be accessed through the VWCC Website.

Program Notes: The program has been accredited by the authority of the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-2901. **Telephone (312) 704-5300.**

Individuals who have a felony or misdemeanor conviction may not be allowed to take the national certification exam. This decision is made by the the America Registry of Radiologic Technology (ARRT). For questions regarding this issue call the ARRT or visit their website at www.ARRT.org.

Clinical agencies may require that students have periodic background checks and drug screenings completed at the student’s expense before beginning clinical rotations. A positive background check, drug screen, and/or felony conviction may dismiss the student from the program.

Retention Policy: Successful completion of the program requires students to maintain a “C” or better in all Radiation Oncology courses and MTH 163. MTH 163 must be successfully completed by the end of the first spring semester. A complete statement of the above policies is outlined in the Radiation Oncology Student Handbook.

Associate of Applied Science

172

Purpose: This curriculum is designed to prepare selected students to perform the responsibilities of an entry-level radiographer. Upon completion of the curriculum, graduates are eligible to apply to take The American Registry of Radiologic Technologists (ARRT) examination leading to certification as a Registered Technologist in Radiography: RT(R)

Program Objectives: Graduates may apply for employment in hospitals, education, industry, clinics, government agencies, physician's offices, emergency care centers and apply to modality programs.

Developmental Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

English: Applicants must receive an ENG 111 placement test recommendation or have successfully completed all developmental English requirements.

Math: Students who do not demonstrate proficiency in the following mathematical units will be required to complete developmental requirements: MTE 1, 2, 3, 4, 5, 6, 7, 8, and 9.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Radiography program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	BIO	141	Human Anatomy and Physiology I	4
___	HLT	143*	Medical Terminology I	3
___	RAD	121	Radiographic Procedures I	4
___	RAD	131	Elementary Clinical Procedures I	3
___	SDV	100	College Success Skills (or SDV 108)	1

Spring Semester

___	RAD	245	Radiologic Specialties	2
___	RAD	125	Patient Care Procedures	3
___	RAD	132	Elementary Clinical Procedures II	3
___	RAD	221*	Radiographic Procedures II	4
___	MTH	120*	Introduction to Mathematics	3

Summer Semester

___	___	___	Health or Physical Education (HLT/PED) ²	1
___	RAD	190*	Coordinated Internship	3
___	RAD	205	Radiation Protection and Radiobiology	3

SECOND YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	RAD	111	Radiologic Science I	4
___	RAD	231	Advanced Clinical Procedures I	5
___	RAD	240	Radiographic Pathology	3

Spring Semester

___	RAD	112	Radiologic Science II	4
___	RAD	232	Advanced Clinical Procedures II	5
___	___	___	Humanities/Fine Arts Elective (List A) ¹	3
___	___	___	Social Science Elective (List A) ¹	3

Summer Semester

___	RAD	215	Correlated Radiographic Theory	2
___	RAD	290*	Coordinated Internship	3

Total Minimum Credits for Degree

72

¹ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

² Health (HLT 105) or a PE class that may fulfill this general education requirement however, the required CPR certification for Radiography is American Heart Association, Healthcare Provider CPR which includes infant, child, adult and AED.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Radiography

Admission Requirements: Applicants to the Radiography program must hold a high-school diploma or GED and meet the developmental requirements listed to the left. Additionally, applicants must complete prerequisites listed below with a grade of "C" or higher by the end of Spring Semester prior to the beginning of the program:

- Algebra I - II
- 2 Lab Sciences

Admission Procedures: The Radiography program applicant is responsible for making certain that the following have been submitted in addition to a current college application by the **February 1st** deadline:

- Completed program application form
- Official high school transcript or copy of GED scores, if applicable
- Official transcripts from all colleges attended (Virginia Western and other Virginia community college transcripts are not necessary)

The Radiography Program is a selective admissions program requiring an application to the college as well as a separate application to the program. For details about the Admission Requirements go to the radiography website under Curriculum Information:

<http://www.viriniawestern.edu/academics/health/radiography/index.php>.

Application packets are also available in the Health Professions and college Admissions offices. Early application is encouraged for advising purposes. Once the above documentation has been evaluated, applicants are encouraged to contact the Health Careers Specialist for any additional questions and advising.

Qualified applicants will be contacted for interviews which are usually held in February and March. The admissions process also includes interviews with radiography instructors and program head, and a writing sample. Students will also be required to take a computerized entrance test at the student's expense.

Program Notes: Individuals who have a felony or misdemeanor conviction may not be allowed to take the national certification exam. This decision is made by The American Registry of Radiologic Technologies (ARRT). For questions regarding this issue, call the ARRT at (651) 687-0048 or visit their website at www.arrt.org.

Clinical agencies may require that students have periodic background checks and drug screenings completed at the student's expense before beginning clinical rotations. A positive background check, drug screen, and/or felony conviction may dismiss the student from the program.

The program is accredited by the authority of the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-2901; **(312) 704-5300**.

Retention Policy: Successful completion of the program requires the student maintain a "C" or better grade in all Radiography courses, BIO elective and HLT 143. A complete statement of all of the above policies is outlined in the Radiography Handbook, which is available upon admission into the program.

Technical Studies: Energy Management

Associate of

Applied

Science

718-02

Purpose: This curriculum is designed to prepare students for the challenges of designing, promoting, auditing, managing, and implementing energy systems in today's society of rapidly changing, energy related industries and residential structures. Energy management students study conventional energy generation and distribution as well as alternative energy with wind, solar(PV) solar(thermal,) geothermal, energy efficiency, and energy production systems to develop an understanding of the challenges and opportunities in developing a renewable energy economy.

Program Objectives: Targeted occupations include Energy Auditor, Energy Manager, Energy Rater, Energy Consultant, Home Performance Consultant, Building Performance Consultant, Home Energy Rater, and Energy Engineering Technician.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Technical Studies program head as listed on program webpage.

FIRST YEAR

Fall Semester

___	BLD	111	Blueprint Reading and the Building Code	3
___	ELE	130*	Electricity	4
___	ELE	176*	Introduction to Alternative Energy Including Hybrid Systems	3
___	ENG	111*	College Composition I	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	SAF	127	Industrial Safety	2
___	SDV	101	Orientation to Engineering (or SDV 100)	1

Spring Semester

___	ELE	138	National Electrical Code Review I	2
___	ENE	100*	Conventional and Alternative Energy Applications	4
___	ENG	115	Technical Writing (or AST 205)	3
___	ITE	115	Intro to Computer Applications and Concepts	3
___	MTH	120*	Intro to Mathematics (or MTH 115)	3

SECOND YEAR

Fall Semester

___	AIR	281	Energy Management I	3
___	ELE	225	Electrical Control Systems	4
___	IND	190	Coordinated Internship I	3
___	___	___	Energy Management Elective ³	4
___	___	___	Social Science Elective (List A) ²	3

Spring Semester

___	AIR	282	Energy Management II	3
___	DRF	201*	Computer Aided Drafting and Design	3
___	___	___	Health or Physical Education (HLT/PED) ¹	1
___	IND	290	Coordinated Internship II	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3
___	___	___	Social Science Elective (List B) ²	3

Total Minimum Credits for Degree

65

¹ Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

² Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

³ Faculty advisor approved energy management electives are strongly recommended to choose from the following prefixes: PV- ELE 177, Wind - ELE 178, or Solar Thermal - ENE 105.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Associate of Applied Science

DISTANCE LEARNING PROGRAM

Offered through partnership with Blue Ridge Community College (BRCC)

This curriculum is designed for those students who for personal or financial reasons cannot travel to Weyers Cave for the on-campus program. Students may complete general education requirements at Virginia Western. Veterinary technology courses are interactive, two-way audio and video, and are transmitted from Blue Ridge Community College to Virginia Western via compressed video technology three hours a day, two days a week.

Purpose: This curriculum is designed to prepare students as veterinary technicians.

Program Objectives: In Virginia, licensed veterinary technicians working under the direct supervision of a licensed veterinarian may perform those tasks related to animal health except the diagnosis of disease, prescribing drugs, or performing surgery.

Veterinary technicians may be employed in a veterinary hospital, diagnostic/research laboratory, the pharmaceutical industry, zoos/wildlife centers, as sales and livestock managers, or veterinary educators.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

Admissions Requirements: Students who plan to complete the program through distance education at Virginia Western should follow the BRCC application instructions located at <http://community.brcc.edu/vettech/index.php/admission/>. Applications are due to Blue Ridge Community College by January 31, 2015. The next class will be accepted for Fall 2015.

For more information please visit the Veterinary Technology Department at BRCC at <http://community.brcc.edu/vettech/>.

Veterinary Technology

FIRST YEAR

Summer Semester

___	VET	120	Veterinary Medical Terminology and Calculations	3
___	___	___	Health or Physical Education (HLT/PED) ¹	2

Fall Semester

___	VET	105	Introduction to Veterinary Technology	3
___	VET	111	Anatomy and Physiology of Domestic Animals	4
___	ENG	111*	College Composition I	3
___	SDV	100	College Success SKills (or SDV 108)	1

Spring Semester

___	VET	100	Introduction to Animal Science	4
___	VET	216	Animal Pharmacology	3
___	CHM	111*	College Chemistry I	4

SECOND YEAR

Summer Semester

___	VET	236	Companion Animal Behavior	3
___	___	___	Humanities/Fine Arts Elective (List A) ²	3

Fall Semester

___	VET	115	Laboratory Techniques I	4
___	VET	121	Clinical Practices I	4

Spring Semester

___	VET	215*	Laboratory Techniques II	4
___	VET	221*	Advanced Clinical Practices III	4

THIRD YEAR

Summer Semester

___	VET	290	Coordinated Practice in Veterinary Technology	4
___	VET	205*	Applied Veterinary Surgical Nursing	3
___	___	___	Social Science Elective (List A) ²	3

Fall Semester

___	VET	210	Animal Disease and Microbiology	4
___	VET	230	Veterinary Hospital Management	3

Spring Semester

___	VET	217	Introduction to Laboratory, Zoo and Wildlife Medicine	3
___	VET	222*	Advanced Clinical Practices IV	4

Total Minimum Credits for Degree

73

¹ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Program Note: It is the student's responsibility to verify that transcripts have been received at BRCC. Transfer credits are evaluated by the registrar. BRCC transmits this program using compressed video technology. Courses will be offered in sequence to allow a student who takes every course to finish in 9 semesters.

Students will be required to travel to the Weyers Cave Campus three times during the semester for laboratory work and practical exams.

Graduates of this program are eligible to take the National Veterinary Technician Exam (NVTE).

AMT: Administrative Professional

Certificate

218

Purpose: This curriculum is designed to prepare individuals for employment as an administrative professional to executives and/or managers in business and industry. Administrative professionals may also supervise other office personnel.

Program Objectives: Employment opportunities include administrative assistants, medical office personnel, legal assistants, and a variety of administrative support positions.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	AST	101	Keyboarding I	3
___	AST	107	Editing/Proofreading Skills	3
___	ENG	111*	College Composition I	3
___	SDV	101	Orientation to AMT/HIM (Fall Only) (or SDV 100)	1

Spring Semester

___	AST	113*	Keyboarding for Speed Accuracy	1
___	AST	141*	Word Processing I (Microsoft® Word)	3
___	AST	205*	Business Communications	3
___	CST	105	Oral Communications	3

SECOND YEAR

Fall Semester

___	AST	232*	Microcomputer Office Applications	3
___	AST	238*	Word Processing Advanced Operations	3
___	AST	243*	Office Administration I (Fall Only)	3

Spring Semester

___	AST	236*	Specialized Software Applications (Spring Only)	3
___	AST	244*	Office Administration II (Spring Only)	3

Total Minimum Credits for Degree

35

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Exercise Science and Personal Training

Certificate

196

Purpose: This curriculum is designed for the student interested in exercise science and/or the fitness industry.

Program Objectives: Upon completion of the certificate, students wishing to become Certified Personal Trainers may sit for the national certification exam through the American College of Exercise (ACE). Employment opportunities include positions in commercial fitness clubs, city and county recreation programs, private sector businesses providing on-site fitness, privately-owned personal training businesses, or advancing employment opportunities. Individuals are also prepared to work independently as personal trainers.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1 and 2.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: The curriculum can be completed in three semesters or with planning in two semesters and a summer.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	HLT	100	First Aid and Cardiopulmonary Resuscitation	3
___	HLT	125	Anatomy and Physiology for Exercise Science ¹	3
___	CST	100	Principles of Public Speaking	3
___	PED	109	Yoga	1
___	PED	111	Weight Training	1

Spring Semester

___	HIM	249*	Supervision and Management Practices ²	3
___	HLT	206*	Exercise Science ¹	3
___	HLT	217	Exercise and Nutrition for Behavioral Change	3
___	HLT	230	Principles of Nutrition and Human Development	3
___	PED	107	Exercise and Nutrition I	2

SECOND YEAR

Fall Semester

___	PED	105	Aerobic Dance I (or PED 106)	1
___	HLT	208*	Fitness and Exercise Training**	3
___	HLT	290*	Coordinated Internship ³	3

Total Minimum Credits for Degree

35

¹ Students are required to successfully complete HLT 125 prior to taking HLT 206.

² Students must have successfully completed HLT 100 & HLT 125 prior to taking HIM 249. Only offered in the spring semester.

³ Students are required to take HLT 125, HLT 206, HIM 249 and HLT 100 prior to taking HLT 290 (internship).

⁴ HLT 105 and HLT 106 may be substituted for HLT 100.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

** Prep course for ACE certification

General Education

Certificate

695

Purpose: The General Education Certificate is designed for students who plan to transfer to a four-year college or university following their studies at Virginia Western. This curriculum provides students with a strong foundation in the general education core competency areas of Communication (oral and written), Critical Thinking, Cultural and Social Understanding, Information Literacy, Personal Development, Quantitative Reasoning, and Scientific Reasoning. The General Education Certificate also provides students with evidence that they have made significant progress toward completing an associate's degree, which gives them a competitive advantage in transferring to a four-year institution.

Program Objectives: To prepare students for transfer to a four-year college or university.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	HIS	121	United States History I (or HIS 111)	3
___	MTH	151*	Mathematics for the Liberal Arts I (or MTH 163* or MTH 157*)	3
___	SDV	100	College Success Skills (or SDV 108)	1
___	___	___	Humanities/Fine Arts Elective (List A) ¹	3
___	___	___	Science Sequence Elective (List A) ¹	4

Spring Semester

___	ENG	112*	College Composition II	3
___	HIS	122	United States History II (or HIS 112)	3
___	___	___	Humanities/Fine Arts Elective (List A) ¹	3
___	___	___	Social Science Elective (List A) ¹	3
___	___	___	Science Sequence Elective (List A) ¹	4

Total Minimum Credits for Degree

33

¹ Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

*This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.

Federal Financial Aid is not available to students enrolled in the General Education Certificate Program.

Geographical Information Systems

Certificate

719

Purpose: This program is designed to prepare students for entry-level positions in technologies using Geographic Information Systems (GIS) or to expand the knowledge and skills of individuals presently employed in these fields.

Program Objectives: Graduates may seek employment as GIS operators.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: The use of current ArcGIS® software is emphasized along with exposure to AutoCAD®.

Students must possess computer literacy in order to be successful in this program.

FIRST YEAR

Fall Semester

___	DRF	201*	Computer Aided Drafting and Design I	3
___	EGR	216*	Computer Methods in Engineering and Technology	3
___	MTH	115*	Technical Mathematics I	3
___	SDV	101	Orientation to Engineering (or SDV 100)	1

Spring Semester

___	DRF	202*	Computer Aided Drafting and Design II	3
___	GEO	200	Intro to Physical Geography	3
___	ENG	111*	College Composition I	3

SECOND YEAR

Fall Semester

___	GIS	200*	Geographic Information Systems I	3
___	GIS	210*	Understanding Geographic Data	3

Spring Semester

___	GIS	201*	Geographic Information Systems II	3
___	GIS	205*	GIS 3-Dimensional Analysis	3

Total Minimum Credits for Degree

31

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

HIM: Electronic Medical Records Management

Certificate

285

Purpose: This curriculum is designed to prepare graduates to perform essential electronic medical records management functions.

Program Objectives: Employment opportunities for medical records managers are plentiful throughout the country in physicians' offices, HMOs, urgent care centers, managed care practices, and other types of health agencies.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	AST	101	Keyboarding I	3
___	ENG	111*	College Composition I	3
___	HIM	130	Healthcare Information Systems	3
___	HIM	230	Information Systems and Technology in Health Care (Fall Only)	3
___	SDV	101	Orientation to AMT/HIM (or SDV 100)	1

Spring Semester

___	AST	141*	Word Processing I (Microsoft® Word)	3
___	AST	154	Voice Recognition Applications	1
___	HIM	233*	Electronic Health Records Management (Spring Only)	3
___	HLT	143*	Medical Terminology I	3
___	PSY	120	Human Relations	3

SECOND YEAR

Fall Semester

___	AST	205*	Business Communications	3
___	AST	232*	Microcomputer Office Applications	3
___	HIM	226	Legal Aspects of Health Record Documentation	2

Total Minimum Credits for Degree

34

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Practical Nursing

Certificate

157

Also See Nursing

Purpose: This curriculum is designed to prepare students for a career as a Licensed Practical Nurse (LPN). The program will provide instruction to prepare qualified students to meet the health care needs of the community within the scope of practice of practical nursing, as defined by the Virginia Board of Nursing. Graduates of this program earn a Certificate in Practical Nursing and will be academically eligible to take the NCLEX-PN examination.

Program Objectives: Employment opportunities include nursing homes, hospices, public health and community nursing, medical offices and clinics, and acute and long-term care facilities.

Developmental Requirements:

ENGLISH - Applicants must receive an ENF 3 or ENG 111 placement test recommendation. If this placement is not achieved, applicants must have successfully completed all developmental English requirements.

MATH – Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, and 4.

FIRST YEAR

Fall Semester

___	ENG	111*	College Composition I	3
___	NUR	135	Drug Dosage Calculations	2
___	PNE	141	Nursing Skill I	3
___	PNE	155	Body Structure and Function ³	4
___	SDV	100	College Success Skills (or SDV 108) ¹	1

Spring Semester

___	PNE	110	Practical Nursing Health and Disease I	5
___	PNE	142	Nursing Skills II	3
___	PNE	174	Applied Pharmacology for Practical Nurses	1
___	PSY	230*	Developmental Psychology	3

SECOND YEAR

Fall Semester

___	PNE	111	Practical Nursing Health and Disease II	5
___	PNE	158	Mental Health and Psychiatric Nursing	2
___	PNE	181	Clinical Experience I	5

Spring Semester

___	___	___	Health or Physical Education (HLT/PED) ²	2
___	PNE	145	Trends in Practical Nursing	1
___	PNE	182	Clinical Experience II	5
___	PNE	136	Care of Maternal, Newborn, and Pediatric Patients	4

Total Minimum Credits for Degree

49

¹ Students who have not previously completed SDV 100 or SDV 108 must enroll in SDV 100 or SDV 108 during the first semester of the practical nursing program.

² HLT 105 or CPR certification can be used to satisfy 1 credit of this requirement.

³ Students who have completed BIO 141 and BIO 142 may receive credit for PNE 155.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Practical Nursing

Program Note: The certificate program in Practical Nursing requires four full-time semesters of study and is approved by the Virginia Board of Nursing. The Board of Nursing can deny licensure to any applicant who has filed false credentials, who has falsely represented facts on the application for licensure, and/or has committed a felony or misdemeanor. Some health care facilities may not employ individuals who have committed certain criminal acts and may conduct criminal background checks before hiring. Criminal background checks and urine drug screens are required for entrance into some clinical agencies. Students who have convictions may be prohibited from clinical agencies and may not complete the certificate program.

Retention Policy: Students must pass each theoretical and clinical nursing course in order to proceed to the next course. Students must maintain a minimum GPA of 2.0 to continue in the program.

Admission Requirements: Applicants to the Practical Nursing program must hold a high school diploma or GED. Applicants must meet the requirements for admission to credit-level coursework established by the college.

1. Applicants must have completed one unit of high school or college-level Biology with a grade of "C" or better.
2. Applicants must have a cumulative high school or college-level GPA of 2.0. College GPA is based on at least 12 credit hours of college credit in a 12-month time frame. The GPA is determined at the end of fall semester prior to admission.
3. Applicants must complete required evaluative tests administered at Virginia Western.

Admission Procedures: Admission to the program is competitive. Students are admitted once a year in August. Prospective applicants who are accepted into the program must attend an information session. While applications are accepted at any time, to be eligible for admission the application packet must be submitted by April 1st of the admission year. Applications may be accepted after this date on a space available basis. The criteria for admission to the practical nursing program are outlined in the Practical Nursing Admissions Packet. Additional information related to entrance testing requirements will be given to qualified applicants in the spring semester.

Letters are mailed in May regarding fall admission. All application materials must be submitted to the attention of the Health Careers Information Specialist prior to April 1. The applicant is responsible for making certain that the following have been submitted in addition to the college application: completed practical nursing application form, written essay (criteria listed on back of application), official high school transcript, copy of GED scores (if applicable), official transcripts from all colleges attended (VWCC and other Virginia community colleges are not required). Applicants being considered for admission will be required to take a nursing entrance test during the spring semester (nonrefundable fee is the responsibility of the applicant). Applicants must attend a personal interview demonstrating satisfactory oral and written communication skills. Qualified applicants are considered without regard to race, color, gender, age, religion, disability, national origin, or other non-merit factors.

Applicants should be aware that meeting the curriculum admission standards does not guarantee program admission. All applicants should review and sign the Essential Functions for Practical Nursing. Applicants will be notified in writing of the action taken by the Practical Nursing Admissions Committee in May. Students interested in this program should consult the Practical Nursing Program page for additional information and responsibilities. The page can be accessed through the Virginia Western website

<http://www.virginiawestern.edu/academics/health/practicalnursing/index.php>

Surgical Technology

Certificate

DISTANCE LEARNING PROGRAM

Offered through partnership with Piedmont Virginia Community College (PVCC)

The Surgical Technology Certificate is offered through a distance learning partnership between Piedmont Virginia Community College, Virginia Western Community College, and Lewis-Gale Medical Center. Students complete general education requirements at Virginia Western. Surgical technology courses are offered through PVCC at Virginia Western via web-based conferencing technology.

Purpose: This curriculum is designed to provide the community with individuals who can function as surgical technologists. This program of study will provide students with an entry-level career in the health care field that is rewarding, in demand, and provides an opportunity for career advancement.

Program Objectives: This three-semester Surgical Technology certificate program will prepare individuals to perform selected activities in the operating room as an entry-level member of the surgical team. The certificate curriculum is designed to provide graduates the opportunity to become nationally certified as a surgical technologist.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

Admission Requirements: Students who plan to complete the program through distance education at Virginia Western should follow the PVCC application instructions located at www.pvcc.edu/programs_study/certificate/cert_surgicaltechnology.php. Completion of the Surgical Technology program application is due by May 1 to Piedmont Virginia Community College. For more information please contact the Health and Life Sciences Division at PVCC: (434) 961-5445.

FIRST YEAR

Fall Semester

___	BIO	141*	Human Anatomy and Physiology I	4
___	HLT	143*	Medical Terminology	3
___	SUR	140	Introduction to Surgical Care	4
___	SUR	145	Fundamentals of Surgical Care	4

Spring Semester

___	BIO	142*	Human Anatomy and Physiology II	4
___	SDV	100	College Success Skills (or SDV 108)	1
___	SUR	210	Surgical Procedures	8
___	SUR	250	Surgical Pharmacology	2

Summer Semester

___	BIO	205	General Microbiology	4
___	ENG	111*	College Composition I	3
___	SUR	254	Professional Issues	1
___	SUR	260	Clinical Practicum	5

Total Minimum Credits for Degree

43

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Note: Surgical technology classes will be completed at Virginia Western through Web-based conferencing technology from PVCC.

Accounting

Career

Studies

Certificate

221-203-02

Purpose: This curriculum is designed for persons who seek employment as a bookkeeper or as an accounting clerk.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	ACC	124	Payroll Accounting	3
___	ACC	211*	Principles of Accounting I	4
___	AST	205*	Business Communications	3
___	BUS	125*	Applied Business Mathematics	3
___	ITE	115	Intro to Computer Applications and Concepts	3

Spring Semester

___	ACC	212*	Principles of Accounting II	4
___	ACC	215*	Computerized Accounting (Spring Only)	3
___	ACC	261*	Principles of Federal Taxation I	3
___	ITE	140	Spreadsheet Software	3

Total Minimum Credits for Degree

29

** This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Advanced Technology in Mechatronics

Career

Studies

Certificate

221-706-90

Purpose: This curriculum is designed to challenge the student with hands-on instruction in mechanical, electrical and computer systems in preparation for the Siemens Mechatronics Systems Certification. A Siemens Certified Mechatronic Systems Associate will function as a highly skilled technician who can work with modules and components in complex mechatronic systems as well as be able to assess and analyze the system as a whole. A certified Associate can manage, investigate, repair and troubleshoot mechatronic systems, with the aim of operational and cost efficiency, and process control.

Program Objectives: Graduates who successfully complete the Siemens Mechatronics Systems Certification may obtain a job as a certified mechatronics technician; designing, installing and commissioning systems, including instrumentation, controls and automation.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: Graduates may continue their studies in the AAS Mechatronics Systems Engineering Technology Program. Upon completion of the Advanced Technology in Mechatronics Career Studies Certificate, students will be prepared to take the Siemens Mechatronic Systems Certification Program (SMSCP) Level I exam.

FIRST YEAR

Fall Semester

___	EGR	123	Intro to Engineering Design	2
___	ETR	113*	DC and AC Fundamentals I	4
___	IND	108	Technical Computer Applications (or EGR 216)	3

Spring Semester

___	EGR	105	Intro to Problem Solving in Technology	1
___	MEC	162	Applied Hydraulics and Pneumatics	3

SECOND YEAR

Fall Semester

___	ETR	286*	Principles and Applications of Robotics	3
___	IND	116	Applied Technology	3
___	MEC	140*	Introduction to Mechatronics	3

Spring Semester

___	IND	113	Materials and Processes in Manufacturing I	3
___	IND	243*	Principles and Applications of Mechatronics	3

Total Minimum Credits for Degree

28

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Air Conditioning and Refrigeration

Career

Studies

Certificate

221-903-10

Purpose: This curriculum is designed to meet the short-term training needs of the adult part-time student by presenting the essential technical concepts and practices of the air conditioning and refrigeration field.

Program Objectives: Employment opportunities include air conditioning/refrigeration system installer, air conditioning system service technician, and air conditioning sales.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3. It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: Completion of the degree meets the educational requirements for taking the journeyman's exam; however, students must have two years of occupational experience to qualify to take the exam.

The program also prepares the student to take the EPA Section 608 Certification test, which is now required of all people employed in the installation, maintenance and repair of air conditioning and refrigeration equipment. This certification test is given on campus during the student's first year of studies.

FIRST YEAR

Fall Semester

___	AIR	121*	Air Conditioning and Refrigeration I	3
___	ELE	133*	Practical Electricity I	3

Spring Semester

___	AIR	122*	Air Conditioning and Refrigeration II	3
___	AIR	238*	Advanced Troubleshooting and Service	3

SECOND YEAR

Fall Semester

___	AIR	123*	Air Conditioning and Refrigeration III	3
___	WEL	120	Introduction to Welding	3

Spring Semester

___	AIR	154*	Heating Systems I	3
___	BLD	159	Mechanical Code and Certification Preparation	3

Total Minimum Credits for Degree

24

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Career

Studies

Certificate

221-298-01

Purpose: This curriculum is designed to prepare individuals for administrative assistant employment opportunities.

Program Objectives: Employment opportunities include executive assistants, administrative specialists, and other office-related positions.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

AMT: Executive Assistant

FIRST YEAR

Fall Semester

___	ACC	124	Payroll Accounting I	3
___	AST	101	Keyboarding I	3
___	AST	107	Editing/Proofreading Skills	3
___	AST	154	Voice Recognition Applications	1

Spring Semester

___	AST	102*	Keyboarding II (Spring Only)	3
___	AST	113*	Keyboarding for Speed and Accuracy	1
___	AST	141*	Word Processing I (Microsoft® Word)	3
___	AST	205*	Business Communications	3

SECOND YEAR

Fall Semester

___	AST	232*	Microcomputer Office Applications	3
___	AST	238*	Word Processing Advanced Options	3

Total Minimum Credits for Degree

26

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Architectural Civil Engineering Aide

Career

Studies

Certificate

221-895-82

Purpose: This program is designed to prepare students for entry-level positions in architectural and civil engineering technology or to expand the knowledge and skills of individuals presently employed in these fields.

Program Objectives: Graduates may seek employment as an architectural or civil engineering technology aide.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: Students must possess computer literacy in order to be successful in this program. All of the courses offered through this program may be applied towards the AAS degree in Architectural/Civil Technology.

FIRST YEAR

Fall Semester

___	DRF	201*	Computer Aided Drafting and Design I	3
___	MTH	115*	Technical Mathematics I	3

Spring Semester

___	ARC	133	Construction Methodology and Procedures I	3
___	DRF	128*	Geometric Dimensioning and Tolerancing	3
___	DRF	202*	Computer Aided Drafting and Design II	3

SECOND YEAR

Fall Semester

___	ARC	221*	Architectural CAD Applications Software I	3
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Spring Semester

___	CIV	135	Construction Management and Estimating	3
___	CIV	171*	Surveying I	3

Total Minimum Credits for Degree

24

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Automotive Analysis and Repair

Career

Studies

Certificate

221-909-01

Purpose: This curriculum is designed to train graduates in automotive systems theory, service, and repair.

Program Objectives: Employment opportunities include automotive technician, parts sales and service representative, repair service salesperson, repair service writer, repair technician, tune-up specialist.

This program is competency based to include specific classroom and shop exercises to prepare a student for ASE certification.

Admission Requirements: Applicants must meet the requirements for admission to credit-level course-work established by the college.

FIRST YEAR

Fall Semester

___	AUT	241	Automotive Electricity I	4
___	AUT	265 ¹	Automotive Braking Systems (or AUT 266)	4

Spring Semester

___	AUT	126*	Auto Fuel and Ignition Systems	5
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SECOND YEAR

Fall Semester

___	AUT	266 ¹	Auto Alignment, Suspension and Steering (or AUT 265)	4
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Total Minimum Credits for Degree

17

**This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

¹ *AUT 265 and 266 are taught in alternate years.*

Note: *Dual-enrolled high school students must graduate from high school before officially declaring and/or graduating from this program.*

Cisco™ CCNA™ Networking

Career

Studies

Certificate

221-732-12

Purpose: This curriculum is designed to teach students the skills needed to design, build, and maintain small to medium-size networks.

Program Objectives: This program provides students with the opportunity to master the material necessary to earn the Cisco™ Certified Network Associate (CCNA™) certification, enter the workforce, and/or further their education and training in the computer networking field. Employment opportunities include telecommunications technician, LAN/ WAN technician/cable installer, technical representative/salesperson.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Program Notes: Students must possess computer literacy in order to be successful in this program.

FIRST YEAR

Fall Semester

___	TEL	150	Internetworking I (1 st 8 weeks)	4
___	TEL	151*	Internetworking II (2 nd 8 weeks)	4

Spring Semester

___	TEL	250*	Internetworking III (1 st 8 weeks)	4
___	TEL	251*	Internetworking III (2 nd 8 weeks)	4

Total Minimum Credits for Degree

16

**This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

Computed Tomography Imaging (CT)

Career

Studies

Certificate

221-172-02

Purpose: The Computed Tomography Imaging Career Studies Program is designed to prepare selected ARRT eligible or Registered Technologists to qualify as contributing members of the allied health interdisciplinary team which has need for highly skilled CT technologists. Upon completion of the curriculum and successful completion and documentation of all required clinical competencies as set forth by The American Registry of Radiologic Technologists (ARRT), the technologist will be eligible to apply to take the national registry examination leading to advanced certification in CT by the ARRT.

Occupational Objectives: The technologist is eligible to apply to take the national registry examination leading to advanced certification in CT by the ARRT.

Retention Policies: Technologists who receive a final grade lower than "C" in any course will not receive the certificate until a grade of "C" or better is obtained. Technologists can petition to retake courses.

A limited local clinical component is available. Students must have a current CPR Healthcare Provider certification and must maintain that certification throughout clinicals. If interested, please contact the Radiography Program Head.

This program begins in odd fall semesters (for example Fall 2015).

FIRST YEAR

Fall Semester

___	RAD	242*	Computed Tomography Procedures and Instrumentation	2
___	RAD	247*	Cross-Sectional Anatomy	3

Spring Semester

___	RAD	244*	Case Studies in Computed Tomography	1
___	RAD	228	Enhanced Patient Care for Computed Tomography	3

Total Minimum Credits for Degree

9

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Admission Requirements and Procedures: The student in Computed Tomography must have completed an approved program in radiography, radiation oncology or nuclear medicine technology. The student must be registered or registry eligible by the appropriate certification agency. Applicants must have maintained a "C" average in past program courses in the discipline of certification.

Applicants must complete an application to VWCC, provide official transcripts of all other colleges attended, provide a minimum of 2 letters of reference and have an interview with a member of the Radiography program faculty prior to formal admission. The student in Computed Tomography must abide by all community college policies.

Students are responsible for Internet access for distance courses.

Culinary Arts

Career

Studies

Certificate

221-242-03

Purpose: This curriculum is designed to provide students with the basic skills necessary to obtain an entry-level position in the culinary industry.

Program Objectives: This curriculum prepares graduates to enter the workforce at entry level in the following positions: line cook, pantry cook, prep and/or production cook and vegetable cook. With successful work experience, students will be able to become lead cooks.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Program Requirements: To successfully complete the laboratory components of the program, the student must be able to perform the essential functions of a culinarian #1 - 17 as listed under the Associate of Applied Science Degree.

Program Notes: Dual enrollment opportunities with secondary school programs in the college's service area are available.

FIRST YEAR

Fall Semester

___	HRI	106	Principles of Culinary Arts I	3
___	HRI	154	Principles of Hospitality Management	3
___	HRI	158	Sanitation and Safety	3

Spring Semester

___	HRI	145*	Garde Manger	3
___	HRI	219*	Stock, Soup and Sauce Preparation	3

SECOND YEAR

Fall Semester

___	HRI	119	Applied Nutrition for Food Service	3
___	HRI	128*	Principles of Baking	3

Spring Semester

___	HRI	206*	International Cuisine	3
___	HRI	207*	American Regional Cuisine	3

Total Minimum Credits for Degree

27

**This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

NOTE: Fall and Spring course sequence are only taught in their respective semesters.

Culinary Arts: Baking and Pastry

Career

Studies

Certificate

221-242-05

Purpose: This curriculum is designed to provide students with the basic skills necessary to obtain entry-level baker positions.

Program Objectives: This curriculum prepares graduates to enter the workforce at differing levels in the following positions: baker, bread baker, cake maker and decorator, dessert maker, personal baker and wholesale baker.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Program Requirements: To successfully complete the laboratory components of the program, the student must be able to perform the essential functions of a culinarian #1 - 17 as listed under the Associate of Applied Science Degree.

Program Notes: Dual enrollment opportunities with secondary school programs in the college's service area are available.

FIRST YEAR

Fall Semester

___	HRI	128*	Principles of Baking ¹	3
___	HRI	158	Sanitation and Safety	3
___	HRI	280*	Principles of Advanced Baking and Pastry ¹	3
___	SDV	101*	Orientation to Baking and Pastry	2

Spring Semester

___	HRI	281*	Artisan Breads	3
___	HRI	282*	European Tortes and Cakes	3
___	HRI	283*	Custards and Cremes	3
___	HRI	285*	Chocolate and Sugar Arts	3

Summer Semester

___	HRI	284*	Specality, Spa and Plated Desserts	3
___	HRI	286*	Wedding and Specality Cakes	3

Total Minimum Credits for Degree

29

¹ HRI 128 will be scheduled during the first 8 weeks and HRI 280 will be scheduled during the second 8 weeks in order to satisfy requisite requirement.

*This course has a requisite. Requisties for all courses are listed in the course description section at the back of the catalog.

NOTE: Fall and Spring course sequence are only taught in their respective semesters.

Early Childhood Development

Career

Studies

Certificate

221-636-04

Purpose: This curriculum is an introduction to the field, designed to provide entry-level competencies documented by Virginia's Competencies for Early Childhood Professionals. These competencies include 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 curriculum.

Program Objectives: This certificate also meets the requirements for the Virginia Early Childhood Development Certificate (VECD); an alternative credential to the CDA designed to meet Head Start credentialing requirements. Students wishing to earn the VECD should speak with the Program Head in Early Childhood Development, as additional components and documentation are required, including completion of CHD 167: Resource File.

Employment opportunities include positions in childcare centers, family day care homes, preschool programs, centers for children with special needs, residential childcare facilities and industry associated centers.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Program Notes: All required courses also apply towards the AAS degree in Early Childhood Development.

Each student is responsible for transportation to and from field sites used for laboratory experience. Students are also responsible for any fees or costs

FIRST YEAR

Fall Semester

___	CHD	120	Intro to Early Childhood Education	3
___	CHD	145	Teaching Art, Music, and Movement to Children	3
___	CHD	165*	Observation and Participation in Early Childhood/Primary Settings	3

Spring Semester

___	CHD	205	Guiding the Behavior of Children	3
___	HLT	135	Child Health and Nutrition (or EDU 235)	3
___	SDV	100	College Success Skills (or SDV 108)	1

Total Minimum Credits for Degree

16

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Electrical Wiring

Career

Studies

Certificate

221-706-01

Purpose: This curriculum is designed to provide students with the basic skills necessary to obtain an entry-level electrician position.

Program Objectives: Employment opportunities include plant electrician, electrician, estimator and entrance positions in the electrical construction and maintenance field as an apprentice.

This certificate meets the 240 clock hours of formal training required to take the Journeyman Electrician Exam. In addition to successful completion of the Journeyman Exam, four years of practical experience are required to become a Licensed Journeyman.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	BLD	111	Blueprint Reading and Building Code	3
___	ELE	110*	Home Electric Power	3
___	ELE	133*	Practical Electricity I	3

Spring Semester

___	ELE	134*	Practical Electricity II	3
___	ELE	138*	National Electrical Code Review I	2
___	SAF	127	Industrial Safety	2

Total Minimum Credits for Degree

16

**This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

Energy Management Systems Technician

Career

Studies

Certificate

221-820-03

Purpose: This curriculum is designed for individuals who are interested in alternative energy. This program begins with the introduction of the fundamentals and safety requirements for alternative energy systems and then proceeds with the application and study of alternative energy systems. The certificate is designed to enhance the awareness of different designs, layouts, wirings, and installations for alternative energy systems.

Program Objectives: Employment opportunities include positions as an alternative energy technician and installation assistant.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	ELE	130*	Electricity	4
___	ELE	176*	Introduction to Alternative Energy Including Hybrid Systems	3
___	SAF	127	Industrial Safety	2

Spring Semester

___	BLD	110	Introduction to Construction	3
___	BLD	111	Blueprint Reading and the Building Code	2
___	ENE	100*	Conventional and Alternative Energy Applications	4

Total Minimum Credits for Degree

19

**This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

Career

Studies

Certificate

221-831-01

Purpose: This curriculum is designed for persons who want to explore engineering as a potential major.

Program Objectives: This program allows students to experience the exciting opportunities in engineering and prepare themselves for an associate of science degree in engineering, which is transferable to a four-year college or university to complete a baccalaureate degree.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9. Additionally, students who do not demonstrate mastery in pre-calculus with trigonometry on the placement test will be required to complete MTH 166 prior to enrolling in MTH 173.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR**Fall Semester**

___	EGR	198	Seminar and Project in Robotics	1
___	EGR	216	Computer Methods in Engineering and Technology	3

Spring Semester

___	EGR	124*	Intro to Engineering and Engineering Methods	3
___	MTH	173	Calculus with Analytical Geometry I	4
___	SDV	101	Orientation to Engineering (or SDV 100)	1

SECOND YEAR**Fall Semester**

___	EGR	120*	Introduction to Engineering	2
___	MTH	174*	Calculus with Analytical Geometry II	4

Spring Semester

___	EGR	126*	Computer Programming for Engineers (C++)	3
___	EGR	140*	Engineering Mechanics-Statics	3
___	EGR	206*	Engineering Economy	3

Total Minimum Credits for Degree**27**

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

The Career Studies Certificate program in Engineering is only available to students taking Dual Enrollment classes through the Virginia Western Regional Academy for Advanced Technology.

Career

Studies

Certificate

221-152-06

Purpose: This curriculum is designed to provide the technical knowledge and practical experience needed for employment as a health records coding technician.

Health Records Coding technicians analyze and interpret a patient's record to determine the proper standardized code that represents the patient's diagnosis and treatment which is used mainly for billing purposes.

Program Objectives: Coding professionals have many employment opportunities which include diagnostic outpatient coding in a medical facility, positions in physicians' offices, and inpatient coding positions.

Graduates of the program are eligible to take the national certifying examinations administered by the American Health Information Management Association of American Academy of Professional Coder.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Program Notes: Students are strongly encouraged to sit for the CPC exam after completing HIM 254.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

HIM: Health Records Coding

FIRST YEAR

Fall Semester

___	AST	101	Keyboarding I	3
___	HIM	226	Legal Aspects of Health Record Documentation	2
___	HLT	143*	Medical Terminology I	3

Spring Semester

___	HLT	144*	Medical Terminology II	3
___	HIM	253*	Health Records Coding	4
___	PSY	120	Human Relations	3

SECOND YEAR

Fall Semester

___	AST	243*	Office Administration I (Fall Only)	3
___	HIM	254*	Advanced Coding and Reimbursements	4

Spring Semester

___	HIM	290*	Coordinated Internship II ¹	3
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Total Minimum Credits for Degree

28

¹ Must be taken in the final term of the program or with instructor's permission.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Career

Studies

Certificate

221-285-87

Purpose: This curriculum is designed to prepare graduates to perform a variety of medical office functions. Examples include scheduling of appointments, maintaining health records, coding clinical data, completing health insurance forms, and carrying out billing and collections functions.

Program Objectives: Employment opportunities include positions in physicians' offices, HMOs, managed care practices, urgent care centers, and in other health-related agencies.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

HIM: Medical Office Specialist

FIRST YEAR

Fall Semester

___	AST	101	Keyboarding I	3
___	AST	107	Editing/Proofreading Skills	3
___	HIM	149	Intro to Medical Practice Management (Fall Only)	2
___	HIM	226	Legal Aspects of Health Record Documentation	2
___	HLT	143*	Medical Terminology I	3

Spring Semester

___	AST	141*	Word Processing I (Microsoft® Word)	3
___	HIM	253*	Health Records Coding	4
___	HLT	144*	Medical Terminology II	3

SECOND YEAR

Fall Semester

___	HIM	190*	Coordinated Internship I ¹	2
___	HIM	254*	Advanced Coding and Reimbursements	4

Total Minimum Credits for Degree

29

¹ Must be taken in the final term of the program or with instructor's permission.

*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Horticulture: Greenhouse Management

Career

Studies

Certificate

221-335-03

Purpose: This curriculum is designed to prepare students for entry-level positions in greenhouse, nursery, and garden center businesses, and to upgrade the skills of those currently employed in the industry.

Program Objectives: Employment opportunities include assistant growers, wholesale and retail salespersons, and production technicians.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

FIRST YEAR

Fall Semester

___	HRT	110	Principles of Horticulture (Fall Only)	3
___	HRT	115	Plant Propagation (Fall Only)	3
___	HRT	207	Plant Pest Management (Fall Only)	3
___	HRT	246	Herbaceous Plants (Fall Only)	3

Spring Semester

___	HRT	117	Tools and Equipment (Spring Only)	2
___	HRT	205	Soils (Spring Only)	3
___	HRT	285	Management of a Horticultural Business (Spring Only)	3
___	HRT	296	Training in Arboretum Internship	2

Total Minimum Credits for Degree

22

Horticulture: Landscaping

Career

Studies

Certificate

221-335-14

Purpose: This curriculum is designed to prepare students for entry-level positions in landscaping design businesses and to upgrade the skills of those currently employed in the industry.

Program Objectives: Employment opportunities include landscape designers and landscape technicians.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

FIRST YEAR

Fall Semester

___	HRT	110	Principles of Horticulture (Fall Only)	3
___	HRT	201	Landscape Plants I (Fall Only)	3
___	HRT	207	Plant Pest Management (Fall Only)	3
___	HRT	246	Herbaceous Plants (Fall Only)	3

Spring Semester

___	HRT	117	Tools and Equipment (Spring Only)	2
___	HRT	227	Professional Landscape Management (Spring Only)	3
___	HRT	231*	Planting Design I (Spring Only)	3
___	HRT	269	Professional Turf Care (Spring Only)	3
___	HRT	296	Training in Arboretum Internship	2

Total Minimum Credits for Degree

25

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

IT: Database and Program Developer

Career

Studies

Certificate

221-299-12

Purpose: This curriculum is designed to provide students with skills in the aspects of database and programming development necessary for medium to large size companies.

Program Objectives: Employment opportunities include entry-level positions in fields including Programmer, Database Developer, or Software Architect.

Admission Requirements: Applicants must meet the requirements for admission to credit-level course-work established by the college.

Program Notes: Students enrolling in the program will choose whether to specialize in Java or Smartphone and Tablet programming.

JAVA PROGRAMMING SEQUENCE

FIRST YEAR

Fall Semester

___	ITP	100	Software Design	3
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Spring Semester

___	ITD	130	Database Fundamentals	3
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___	ITP	120*	Java Programming I	4
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SECOND YEAR

Fall Semester

___	ITD	250*	Database Architecture and Administration	3
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___	ITP	220*	Java Programming II	4
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Spring Semester

___	ITP	246*	Java-Server Side Programming	4
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Total Minimum Credits for Degree

21

SMARTPHONE AND TABLET SEQUENCE

FIRST YEAR

Fall Semester

___	ITP	100	Software Design	3
-----	-----	-----	-----------------	---

Spring Semester

___	ITD	130	Database Fundamentals	3
-----	-----	-----	-----------------------	---

___	ITP	136*	C# Programming I	4
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SECOND YEAR

Fall Semester

___	ITD	250*	Database Architecture and Administration	3
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___	ITP	137	Programming IOS Devices	4
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Spring Semester

___	ITP	226*	Mobile Java Android Development	4
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Total Minimum Credits for Degree

21

IT: Desktop Support Technician

Career

Studies

Certificate

221-299-04

Purpose: This curriculum is designed to give students the knowledge and skills to meet industry needs for hardware repair, desktop software support, and basic networking skills.

Program Objectives: Employment opportunities include entry-level positions as hardware repair personnel, software installers, and basic network trouble shooting. Occupational job titles would include: Help Desk Support Technician, Desktop Support Technician, and Hardware Repair Technician.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

FIRST YEAR

Fall Semester

___	ITN	107	Personal Computer Hardware and Troubleshooting ¹	3
___	ITN	109	Internet and Network Foundations	3
___	ITN	110*	Client Operating System (Windows 8)	3

Spring Semester

___	ETR	285	Fundamentals of Microcomputer Repair	4
___	ITN	111*	Server Administration (Server 2012)	4

Total Minimum Credits for Degree

17

¹ETR 113 may be used as a substitution for ITN 107.

*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

IT: Network and Security Administration

Career

Studies

Certificate

221-732-02

Purpose: This curriculum is designed to give students the knowledge and skills to meet industry need for administration and support of computer systems.

Program Objectives: Employment opportunities include entry level positions as a Network or Security Administrator. Occupational job titles would include: Network Administrator, Security Administrator, Systems Administrator, Network Technician and Security Analyst.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

FIRST YEAR

Fall Semester

___	ITN	109	Internet and Network Foundations	3
___	ITN	110*	Client Operating System (Windows 8)	3

Spring Semester

___	ITD	130	Database Fundamentals	3
___	ITN	111*	Server Administration (Server 2012)	4

SECOND YEAR

Fall Semester

___	ITN	112*	Network Infrastructure (Server 2012)	3
___	ITN	260	Network Security Basics	3

Spring Semester

___	ITN	113*	Active Directory (Server 2012)	4
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Total Minimum Credits for Degree

23

** This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

IT: Web Designer

Career

Studies

Certificate

221-352-02

Purpose: : This curriculum is designed to assist students in gaining the knowledge necessary to be employed in, or start a business that specializes in Web Design and Web Development. It will prepare students for the spectrum of demands associated with applying the latest technology for Web Design and development, as well as introduce them to the day to day requirements of running a small business.

Program Objectives: Employment opportunities include positions in the areas of Web Design, Web Developing, New & Social Media and Interactive Design.

Admission Requirements: Applicants must meet the requirements for admission to credit-level course-work established by the college.

FIRST YEAR

Fall Semester

___	BUS	116	Entrepreneurship	3
___	ITD	110	Web Page Design I	3
___	ITD	112*	Designing Web Page Graphics	3
___	ITD	115	Web Page Design and Site Management	3

Spring Semester

___	ACC	110	Intro to Computerized Accounting	1
___	BUS	165*	Small Business Management	3
___	ITD	210*	Web Page Design II	3
___	MKT	100	Principles of Marketing	3

Total Minimum Credits for Degree

22

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

IT: Web Programmer

Career

Studies

Certificate

221-352-03

Purpose: : This curriculum is designed to assist students in gaining the knowledge necessary to be employed in Web Design and Web Development. It will prepare students for the spectrum of demands associated with applying the latest technology for Web Design and Web Development.

Program Objectives: Employment opportunities include positions in the areas of Web Design, Web Developing, New & Social Media and Interactive Design.

Admission Requirements: Applicants must meet the requirements for admission to credit-level course-work established by the college.

FIRST YEAR

Fall Semester

___	ITD	110	Web Page Design I	3
___	ITD	112*	Designing Web Page Graphics	3
___	ITP	100	Software Design	3

Spring Semester

___	ITD	210*	Web Page Design II	3
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SECOND YEAR

Fall Semester

___	ITD	115	Web Page Design and Site Management	3
___	ITP	140*	Client Side Scripting	3

Spring Semester

___	ITD	120*	Design Concepts for Mobile Applications	3
___	ITP	225*	Web Scripting Languages	3

Total Minimum Credits for Degree

24

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Career

Studies

Certificate

221-172-04

Purpose: The Magnetic Resonance Imaging Career Studies Program is designed to prepare selected students to qualify as contributing members of the allied health interdisciplinary team which has need for highly skilled MR technologists. Upon completion of the curriculum and successful completion and documentation of all required clinical competencies as set forth by The American Registry of Radiologic Technologists (ARRT) the student is eligible to apply to take the national registry examination leading to advanced certification as a Registered Technologist in MR by the ARRT.

Occupational Objectives: The student is eligible to apply to take the national Registry examination leading to advanced certification as a Registered Technologist in MR by the ARRT.

Retention Policies: Students who receive a final grade lower than a "C" in any course will not receive the certificate until a grade of "C" or better is obtained. Students can petition to retake courses.

This program begins in even fall semesters (for example Fall 2014).

Magnetic Resonance Imaging (MR)

FIRST YEAR

Fall Semester

___	RAD	115	Principles of Magnetic Resonance Imaging	3
___	RAD	247*	Cross-Sectional Anatomy	3

Spring Semester

___	RAD	248	Case Studies in Magnetic Resonance Imaging	3
___	RAD	251	Enhanced Patient Care for Magnetic Resonance Imaging	3

Total Minimum Credits for Degree

12

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Admission Requirements and Procedures: The student in Magnetic Resonance Imaging must have completed an approved program in radiography, radiation oncology or nuclear medicine technology. The student must be registered or registry eligible by the appropriate certification agency. Applicants must have maintained a "C" average in past program courses in the discipline of certification.

Applicants must complete an application to VWCC, provide official transcripts of all other colleges attended, provide a minimum of 2 letters of reference and have an interview with a member of the Radiography program faculty prior to formal admission. The student in Magnetic Resonance Imaging must abide by all community college policies.

Students are responsible for Internet access for distance courses.

Maintenance Technology

Career

Studies

Certificate

221-731-98

Purpose: This curriculum is designed to prepare students for careers in facilities maintenance.

Program Objectives: Employment opportunities include positions in the maintenance department of small industry, health care facilities, and other heavy industry organizations.

Admission Requirements: Applicants must meet the requirements for admission to credit-level course-work established by the college.

Developmental Requirements: Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Program Notes: The program also prepares the student to take the EPA Section 608 Certification test, which is now required of all people employed in the installation, maintenance and repair of air conditioning and refrigeration equipment. This certification test is given on campus during the student's first year of studies.

FIRST YEAR

Fall Semester

___	AIR	121*	Air Conditioning and Refrigeration I	3
___	ELE	133*	Practical Electricity I	3
___	WEL	120	Introduction to Welding	3

Spring Semester

___	AIR	122*	Air Conditioning and Refrigeration II	3
___	AIR	238*	Advanced Troubleshooting and Service	3
___	BLD	111	Blueprint Reading and the Building Code	3
___	MEC	162	Applied Hydraulics and Pneumatics	3

Total Minimum Credits for Degree

21

** This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Management: Business Industrial Supervision

Career

Studies

Certificate

221-212-04

Purpose: The curriculum is designed to prepare individuals to operate in business and industry on the supervisory level by providing a broad foundation of general business, management, technology, industrial safety and human relations.

Program Objectives: Employment opportunities include entry-level supervisory positions including: manager, supervisor, foreman, team leader, or management trainee. Additionally, this program is designed to serve those who may be seeking a promotion to either an entry level management position or higher levels of management responsibility.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	BUS	100	Introduction to Business	3
___	ENG	111*	College Composition I	3

Spring Semester

___	BUS	111	Principles of Supervision I	3
___	ITE	115	Intro to Computer Applications and Concepts	3

SECOND YEAR

Fall Semester

___	BUS	205	Human Resource Management	3
___	PSY	200*	Principles of Psychology	3
___	SAF	127	Industrial Safety	2

Total Minimum Credits for Degree

20

**This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

Management: Entrepreneurship Plus

Career

Studies

Certificate

221-212-10

Purpose: This curriculum is designed for individuals who are interested in learning the fundamentals of starting and operating a business.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Program Objectives: Employment opportunities include entrepreneurship in a variety of occupational fields.

FIRST YEAR

Fall Semester

___	BUS	116	Entrepreneurship	3
___	MKT	100	Principles of Marketing	3
___	___	___	Approved Core Elective ¹	3

Spring Semester

___	ACC	110	Introduction to Computerized Accounting	1
___	BUS	165*	Small Business Management	3
___	___	___	Approved Core Elective ¹	3

Total Minimum Credits for Degree

16

¹ Students must consult with one of the Management faculty advisors prior to selecting these courses.

* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

Management: Human Resource Development

Career

Studies

Certificate

221-212-08

Purpose: This curriculum is designed to prepare students for employment in the human resource management function of business and industry.

Emphasis will be placed on improving workplace readiness skills such as communications, critical analysis, problem-solving, teamwork, and work ethic.

Program Objectives: Employment opportunities include entry level positions within the field of Human Resource Management.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

FIRST YEAR

Fall Semester

___	ACC	124	Payroll Accounting	3
___	BUS	100	Introduction to Business	3
___	BUS	200	Principles of Management	3

Spring Semester

___	BUS	111	Principles of Supervision	3
___	BUS	205	Human Resource Management	3
___	BUS	285*	Current Issues in Management (Spring Only)	3

Total Minimum Credits for Degree

18

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Management: Organizational Leadership

Career

Studies

Certificate

221-212-19

Purpose: This curriculum is designed for students seeking initial employment in leadership, as well as those seeking to advance their careers into management. Emphasis will be placed on improving workplace readiness skills such as communications, critical analysis, problem-solving, teamwork, and work ethic.

Program Objectives: Students will be prepared to enter into leadership roles while developing people skills and exercising the decision making process.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

FIRST YEAR

Fall Semester

___	ACC	110	Introduction to Computerized Accounting	1
___	BUS	100	Introduction to Business	3
___	BUS	111	Principles of Supervision	3

Spring Semester

___	BUS	205	Human Resource Management	3
___	MKT	100	Principles of Marketing	3

SECOND YEAR

Fall Semester

___	BUS	165*	Small Business Management	3
___	MKT	110	Principles of Selling (Fall Only)	3

Total Minimum Credits for Degree

19

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Microcomputer Systems Technology

Career

Studies

Certificate

221-731-68

Purpose: This curriculum is designed to prepare a student for employment in the microcomputer-based telecommunications industry ranging from video and display systems to computer systems and networks.

Program Objectives: Employment opportunities include computer technician, LAN/WAN technician, and technical representative/salesperson.

Note: Courses on A+^R certification and Cisco™ CCNA™ are included in this curriculum.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR

Fall Semester

___	ETR	113*	DC and AC Fundamentals I	4
___	TEL	150	Internetworking I	4

Spring Semester

___	ETR	285	Fundamentals of Microcomputer Repair	4
___	TEL	151*	Internetworking II	4

Total Minimum Credits for Degree

16

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Career

Studies

Certificate

221-157-04

Purpose: Prepares students for a career as a Certified Nurse Aide (CNA). The program will provide instruction to prepare qualified students to meet the health care needs of the community within the scope of practice of a CNA, as defined by the Virginia Board of Nursing. Graduates of this program earn a Career Studies Certificate in Nurse Aide and will be academically eligible to take the Certification Examination.

Program Objectives: Employment opportunities include nursing homes, hospices, public health and community nursing, medical offices and clinics, and acute and long-term care facilities.

Developmental Requirements: ENGLISH - Applicants must receive an ENF 3 or ENG 111 placement test recommendation.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

1. Applicants must have a high school diploma or equivalent or be a dual enrollment student.
2. Applicants must complete required evaluative tests administered at Virginia Western.
3. Applicants must submit an application for admission into the program

Program Note: The career studies certificate in Nurse Aide is approved by the Virginia Board of Nursing. The Board of Nursing can deny certification to any applicant who has filed false credentials, who has falsely represented facts on the application for certification, and/or has committed a felony or misdemeanor. Some health care facilities may not employ individuals who have committed certain criminal acts and may conduct criminal background checks before hiring. Criminal background checks and urine drug screens are required for entrance into some clinical agencies. Students who have convictions may be prohibited from clinical agencies and may not complete the career studies certificate.

Fall/Spring Semester

___	ENG	111*	College Composition I	3
___	SDV	101	Orientation to CNA (or SDV 100)	1
___	NUR	25	Nursing Assistant	3
___	NUR	27	Nursing Aide I	4
___	NUR	21	Nurse Aide Clinical Experience	1
___	HLT	141	Introduction to Medical Terminology	1
___	HLT	145	Ethics for Health Care Personnel	2
___	HLT	105	Cardiopulmonary Resuscitation	1

Total Minimum Credits for Degree

16

Phlebotomy

Career

Studies

Certificate

221-151-02

Purpose: This curriculum is designed to prepare students to perform the responsibilities of an entry-level phlebotomy technician.

Program Objectives: Graduates may apply for employment in a variety of healthcare settings, including hospitals, laboratories, healthcare clinics, and blood donation banks.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college. Applicants must submit a program and college application for admission into this program.

For details about the admission requirements go to <http://www.virginiawestern.edu/academics/smh/index>.

PROGRAM WILL BE OFFERED ONCE EACH SEMESTER (FALL & SPRING)

___	HIM	111	Medical Terminology I	3
___	HLT	105	Cardiopulmonary Resuscitation	1
___	MDL	105	Phlebotomy (1st 8 Weeks)	3
___	HLT	145	Ethics for Health Care Personnel	2
___	MDL	106	Clinical Phlebotomy (2nd 8 Weeks)	4
___	MDL	190	Coordinated Internship (2nd 8 Weeks)	3

Total Minimum Credits for Degree

16

Water and Wastewater Technology

Career

Studies

Certificate

221-828-72

Purpose: This curriculum is designed to prepare students to become water or wastewater plant operators in municipal and industrial treatment facilities and laboratories.

Program Objectives: Coursework in this program academically prepares students to enter the workforce and sit for the state certification exam required for a water or wastewater operator's license. There are minimum educational and experience requirements depending on the various licensure levels. All levels require a high school or GED diploma, training, and on-the-job experience.

Operators must pass an examination certifying that they are capable of overseeing water/wastewater plant operations. There are different levels of certification, depending on the operator's experience and training. Both water and wastewater operators are licensed by experience and education by the Virginia Board for Waterworks and Wastewater Works Operators through the Virginia Department of Professional and Occupational Regulation (DPOR).

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1 and 2.

FIRST YEAR

Fall Semester

___	ENV	110	Introduction to Water/Wastewater Treatment Technology	3
___	ENV	148*	Math for Water/Wastewater Operations	3
___	SAF	127	Industrial Safety	2

Spring Semester

___	ENV	115*	Water Purification	3
___	ENV	149*	Wastewater Treatment Plant Operations	3
___	PSY	120	Human Relations	3

Total Minimum Credits for Degree

17

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Note: Additional courses may be offered for DPOR Water and Wastewater Licensure.

Career

Studies

Certificate

221-995-47

Purpose: This curriculum is designed to prepare students for entry-level positions in production type welding.

Program Objectives: Employment opportunities include arc, gas, MIG, and/or TIG welder or metal fabricator.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Program Notes: To be successful in this program, students must have proficiency in oral and written communication skills and general mathematics.

Welding and Metal Processing

FIRST YEAR

Fall Semester

___	DRF	161	Blueprint Reading I	2
___	WEL	120	Introduction to Welding	3
___	WEL	145	Welding Metallurgy	3

Spring Semester

___	SAF	127	Industrial Safety	2
___	WEL	121*	Arc Welding	2
___	WEL	130*	Inert Gas Welding	3
___	WEL	135*	Inert Gas Welding	2

Total Minimum Credits for Degree

17

**This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Career

Studies

Certificate

221-190-02

Purpose: This program is designed to provide both knowledge and skills related to understanding the dimensions of wellness for occupations in the health, fitness, senior health care, health care support and health related non-profit sector. It also provides post-secondary preparation for entry-level health related career opportunities or career advancement. Graduates may continue their studies in the Exercise Science and Personal Training certificate. Specific courses in this certificate provide in-depth knowledge of lifestyle factors that influence personal health status.

Program Objectives: Employment opportunities include entry-level positions in health related non-profit organizations and foundations.

Admission Requirements: Applicants must meet the requirements for admission to credit-level coursework established by the college.

Developmental Requirements: Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

FIRST YEAR**Fall Semester**

___	HLT	116	Introduction to Personal Wellness Concepts	2
___	HLT	240	Consumer Health Education	3
___	PED	107	Exercise and Nutrition I	2
___	PED	170	Tai Chi I	1
___	SDV	100	College Success Skills	1

Spring Semester

___	HLT	100	First Aid and Cardiopulmonary Resuscitation	3
___	PED	109	Yoga	1
___	PSY	200*	Principles of Psychology (or PSY 230)	3
___	PED	___	PED Elective	1

Total Minimum Credits for Degree**17**

** This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

Description of Courses

Continuing Education and Community Services Programs

In order to provide the widest possible diversification of educational opportunity, Virginia Western Community College schedules credit and noncredit courses and programs to meet educational and training needs outside the realm of traditional college studies. These include classes, institutes, forums, workshops, lectures, and courses to provide: (1) individual cultural enrichment; (2) individual job skill improvement; (3) hobby and leisure-time activity training; (4) service to business and industry in upgrading employee skills; and (5) special services focused on societal and community development. State general-fund tax dollars are not used to support noncredit community service programs.

General Course Information

Course Numbers

Courses numbered 01-09 are developmental studies courses. These courses are designed to prepare students for college-level courses (primarily in the areas of English and mathematics). The credits earned in these courses are not applicable toward associate degree programs. These courses are graded on a Satisfactory/ Unsatisfactory basis and they do not affect students' grade point average. Students enrolled in developmental courses who do not achieve a Satisfactory (S) grade should re-enroll in order to complete all course objectives. Students ordinarily may repeat a course only once.

Courses numbered 10-99 are basic occupational courses for certificate programs. The credits earned in these courses are applicable toward diploma and certificate programs but are not applicable toward an associate degree.

Courses numbered 100-199 are freshman courses applicable toward an associate degree or certificate, and courses numbered 200-299 are sophomore courses applicable toward an associate degree or certificate.

Course Credits

The credit for each course is indicated after the title in the course description. One credit is equivalent to one collegiate semester hour.

Course Hours

The number of lecture hours in class each week (including lecture, seminar, and discussion hours) and/or the number of laboratory hours in class each week (including laboratory, shop, supervised study, and cooperative work experiences) are indicated for each course in the course description. The number of lecture and laboratory hours in class each week are also "contact" hours because it is time spent under the direct supervision of a faculty member.

Course Prerequisites

If any prerequisites are required before enrolling in a course, these prerequisites will be identified in the course description. Courses in special sequences (usually listed as I-II-III) require that prior courses or their equivalent be completed before enrolling in the advanced courses in that sequence. When corequisites are required for a course, usually the corequisites must be taken at the same time. The

prerequisites or their equivalent must be completed satisfactorily before enrolling in a course unless special permission is obtained from the academic deans.

General Usage Courses

The following "General Usage Courses" apply to multiple curricula and all prefix disciplines. General usage courses may be repeated for credit, and may include lecture, laboratory, out-of-class study, or a combination thereof.

(Insert appropriate prefix) 90, 190, 290 Coordinated Internship in (Insert appropriate discipline) (1–5 CR). Supervises on-the-job training in selected business, industrial, or service firms coordinated by the college. Credit/practice ratio not to exceed 1:5 hours. May be repeated for credit. Variable hours.

(Insert appropriate prefix) 93, 193, 293 Studies in (Insert appropriate discipline) (1–5 CR). Covers new content not covered in existing courses in the discipline. Allows instructor to explore content and instructional methods to assess the course's viability as a permanent offering. A "Studies in" course is intended as an experimental course to test its viability as a permanent offering. Each offering of the course must be approved by the Chief Academic Officer or designee. An experimental course may be offered twice, after which the course must be approved under the appropriate discipline according to VCCS processes for adding new courses to the Master Course File. Variable hours per week.

(Insert appropriate prefix) 95, 195, 295 Topics in (Insert appropriate discipline) (1–5 CR). Provides an opportunity to explore topic areas of an evolving nature or of short-term importance in the discipline. Variable hours per week. A "Topics in" course is intended to cover topics of an evolving nature or of short-term importance in the discipline. The course shall be approved by the academic Vice President or designee for a period up to two years. The chief academic officer or designee may approve an extension of another two-year period, after which the course must be approved under the appropriate discipline according to VCCS processes for adding new courses to the Master Course File.

(Insert appropriate prefix) 96, 196, 296 On-site Training in (Insert appropriate discipline) (1–5 CR). Offers opportunities for career orientation and training without pay in selected businesses and industry. Supervised and coordinated by the college. Credit/work ratio not to exceed 1:5 hours. Variable hours per week.

(Insert appropriate prefix) 97, 197, 297 Cooperative Education in (Insert appropriate discipline) (1–5 CR). Provides on-the-job training for pay in approved business, industrial and service firms. Applies to all career-technical curricula at the discretion of the college. Credit/work ratio not to exceed 1:5 hours. Variable hours per week.

(Insert appropriate prefix) 98, 198, 298 Seminar and Project in (Insert appropriate discipline) (1–5 CR). 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.

(Insert appropriate prefix) 99, 199, 299 Supervised Study in (Insert appropriate discipline) (1–5 CR). Assigns problems for independent study outside the normal classroom setting under the guidance and direction of an instructor. Incorporates prior experience and instruction in the discipline. Variable hours per week. Exceptions to the credit limit may be granted by the chief academic officer.

ACC- ACCOUNTING

ACC 110 Introduction to Computerized Accounting (1 CR)

Introduces the computer in solving accounting problems. Focuses on the operation of computers. Presents the accounting cycle and financial statement preparation in a computerized system and other applications for financial and managerial accounting. Lecture 1 hour per week.

ACC 124 Payroll Accounting (3 CR) Presents accounting systems and methods used in computing and recording payroll to include payroll taxes and compliance with federal and state legislation. Lecture 3 hours per week.

ACC 211 Principles of Accounting I (4 CR) Prerequisite: MTE 1, 2 and 3. 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. Lecture 4 hours per week.

ACC 212 Principles of Accounting II (4 CR) Prerequisites: ACC 211. Continues Accounting Principles 211 with emphasis on the application to partnerships, corporations and the study of financial analysis. Includes an introduction to cost and managerial accounting. Computerized component is included. Lecture 4 hours per week. (Fall 2014)

ACC 212 Principles of Accounting II (4 CR) Prerequisites: ACC 211. 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. Lecture 4 hours per week. (Spring 2015)

ACC 215 Computerized Accounting (3 CR) Prerequisite or corequisite ACC 211 or equivalent. 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. Lecture 3 hours per week.

ACC 221 Intermediate Accounting I (4 CR) Prerequisites: ACC 212 or equivalent and BUS 125. Offered in fall semester only. 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. Lecture 4 hours per week.

ACC 231 Cost Accounting I (3 CR) Prerequisite: ACC 212 or equivalent. Offered in fall semester only. Studies cost-accounting methods and reporting as applied to job order, process, and standard cost accounting systems. Includes cost control and other topics. Lecture 3 hours per week.

ACC 261 Principles of Federal Taxation I (3 CR) Prerequisite: ACC 211. 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.



ADJ - ADMINISTRATION OF JUSTICE

ADJ 100 Survey of Criminal Justice (3 CR) 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 CR) 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 CR) 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 120 Introduction to Courts (3 CR) Presents an overview of the American judiciary (the federal and 50 state judicial systems) with emphasis on criminal court structures, functions, and personnel; surveys the judicial system in the Commonwealth of Virginia. Lecture 3 hours per week.

ADJ 130 Introduction to Criminal Law (3 CR) Surveys the general principles of American criminal law, elements of major crimes, and basic steps of prosecution procedure. Lecture 3 hours per week.

ADJ 140 Introduction to Corrections (3 CR) Focuses on societal responses to the offender. Traces the evolution of practices based on philosophies of retribution, deterrence, and rehabilitation. Reviews contemporary correctional activities and their relationships to other aspects of the criminal justice system. Lecture 3 hours per week.

ADJ 164 Case Studies in Murder/Violent Crime (3 CR) Introduces the students to the investigation of murder and other violent crimes by means of classic case studies and, to the extent feasible, local case files. Includes methodology, strategy and tactics, analysis, relevant law, and future trends. Covers evidentiary techniques and technologies with a primary focus on how critical thinking is applied to serious violent crime. Lecture 3 hours per week.

ADJ 186 Forensic Psychology (3 CR) 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 227 Constitutional Law for Justice Personnel (3 CR) 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 229 Law Enforcement and the Community (3 CR) 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 232 Domestic Violence (3 CR) Surveys historical issues that have affected family violence. Examines current trends in the context of the criminal justice system. Lecture 3 hours per week.

ADJ 234 Terrorism and Counter-Terrorism (3 CR) 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 CR) 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 237 Advanced Criminal Investigation (3 CR) Prerequisite: ADJ 236 or division approval. Introduces specialized tools and scientific aids used in criminal investigation. Applies investigative techniques to specific situations and preparation of trial evidence. Lecture 3 hours per week.

AIR – AIR CONDITIONING AND REFRIGERATION

AIR 121 Air Conditioning and Refrigeration I (3 CR) Prerequisite: MTE 1, 2 and 3 or equivalent. Pre/Corequisite: ELE 130 or ELE 133. Studies refrigeration theory, characteristics of refrigerants, temperature, and pressure, tools and equipment, soldering, brazing, refrigeration systems, system components, compressors, evaporators, 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 Air Conditioning and Refrigeration II (3 CR) Prerequisite: AIR 121. Corequisite: AIR 238. Studies refrigeration theory, characteristics of refrigerants, temperature, and pressure, tools and equipment, soldering, brazing, refrigeration systems, system components, compressors, evaporators, 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 123 Air Conditioning and Refrigeration III (3 CR) Prerequisite: AIR 122. Psychometric properties of air, heat load and gain calculation, heated and chilled water systems, duct, design, air distribution and air comfort requirements. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 154 Heating Systems I (3 CR) Prerequisite: AIR 122 and AIR 238. 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. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 238 Advanced Troubleshooting and Service (3 CR) Prerequisites: ELE 130 or ELE 133. Presents advanced service techniques on wide variety of equipment used in refrigeration, air conditioning, and phases of heating and ventilation and controls. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 281-282 Energy Management I-II (3 CR) (3 CR) Introduces methodology for residential audits covering heat flow analysis,

construction methods and materials. Discusses effects of life styles on energy consumption, conservation and practices, renewable energy sources, calculating cost and savings, interviewing and education techniques. Introduces commercial and industrial energy audits, methodology for the performance of audits covering heat flow analysis, construction methods and materials. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ARC - ARCHITECTURE

ARC 100 Introduction to Architecture (3 CR) Outlines history and impact of architecture. Emphasizes dynamics and social aspects of architecture and society; focuses on 19th and 20th century architectural forms. Lecture 3 hours per week.

ARC 121 Architectural Drafting I (3 CR) 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 133 Construction Methodology and Procedures I (3 CR) Studies materials used in construction of buildings, covering foundations to structural framing systems. Includes appropriate use of materials for various construction types. Includes specification of materials and installation procedures; types of specifications and writing procedures; bidding procedures and, contract documents. Lecture 3 hours per week.

ARC 221 Architectural CAD Applications Software I (3 CR) Prerequisite: DRF 202. 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.

ART – ART

ART 101-102 History and Appreciation of Art I-II (3 CR, 3 CR) Presents history and interpretation of architecture, sculpture, and painting. Begins with prehistoric art and follows the development of western civilization to present. Lecture 3 hours per week.

ART 121-122 Drawing I-II (3 CR, 3 CR) Prerequisite for ART 122: ART 121. 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 131-132 Fundamentals of Design I-II (3 CR, 3 CR) Prerequisite for ART 132: ART 131. 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 140 Introduction to Graphic Skills (3 CR) Teaches basic studio skills and concepts. Emphasizes concept development and problem solving using traditional art materials and computer techniques. Uses current graphic software applications. Lecture 2 hours, Laboratory 3 hours, Total 5 hours per week.

ART 141 Typography I (3 CR) Prerequisites: ART 131 and ART 140. Studies the history of letter forms 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. Lecture 2 hours. Studio instruction 3 hours. Total 5 hours per week.

ART 221-222 Drawing III-IV (3 CR, 3 CR) Prerequisites: ART 121 and ART 122 for ART 221; ART 221 for ART 222. Introduces advanced concepts and techniques of drawing as applied to figure, still life, and landscape. Gives additional instruction in composition, modeling, space, and perspective. Encourages individual approaches to drawing. Lecture 1 hour. Studio instruction 4 hours. Total 5 hours per week.

ART 241-242 Painting I-II (3 CR, 3 CR) Prerequisites: For ART 241, prerequisite is ART 122 or divisional approval; for ART 242, the prerequisites are ART 122, ART 241 or divisional approval. Introduces abstract and representational painting in acrylic and/or oil with emphasis on color composition and value. Lecture 1 hour. Studio instruction 4 hours. Total 5 hours per week.

ART 243-244 Watercolor I-II (3 CR, 3 CR) Prerequisites: For ART 243, prerequisite is ART 131 or divisional approval; for ART 244: the prerequisites are ART 131, ART 243 or divisional approval. Presents abstract and representational painting in watercolor, with emphasis on design, color, composition, technique, and value. Lecture 1 hour. Studio instruction 4 hours. Total 5 hours per week.

ART 247 Painting Technique for Illustrators (3 CR) Prerequisites: ART 131-132; ART 243 or divisional approval. Introduces materials and techniques used by the illustrator. Includes water-soluble paints (watercolor, acrylic, gouache), oil-based paints, and mixed media. Lecture 1 hour. Studio instruction 4 hours. Total 5 hours per week.

ART 250 History of Design (3 CR) 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 251-252 Communication Design I-II (3 CR, 3 CR) Prerequisites: For ART 251 and 252: ART 131-132, ART 140, and ART 141. Studies principles of visual communications as applied to advertising in newspapers, magazines, direct mail advertising, house organs, etc.; studies these principles through both print design and web design. Analyzes the influence of contemporary art on design. Lecture 2 hours. Studio instruction 3 hours. Total 5 hours per week.

ART 282 Graphic Techniques (3 CR) Prerequisites: ART 140, ART 132, and ART 141. Focuses on using drawing instruments and materials. Introduces printing processes and mechanics of reproduction. Focuses on production and prepress issues as well as various technologies within the printing field. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

ART 283-284 Computer Graphics I-II (3 CR, 3 CR) Prerequisite: ART 140. Utilizes microcomputers and software to produce computer graphics. Employs techniques learned to solve studio projects, which reinforce instruction and are appropriate for portfolio use. Lecture 1 hour. Studio instruction 4 hours. Total 5 hours per week.

ART 287 Portfolio and Resume Preparation (3 CR) Prerequisites: ART 141, ART 251, ART 282, and ART 283. Focuses on portfolio preparation, resume writing, and job interviewing for students. Recommended for final semester program students. Requires divisional approval. Lecture 1 hour. Studio instruction 2 hours. Total 3 hours per week.

ASL – AMERICAN SIGN LANGUAGE

ASL 101-102 American Sign Language I-II (3 CR) ASL 102 Prerequisite: ASL 101. Introduces the fundamentals of American Sign Language (ASL) used by the Deaf Community, including basic vocabulary, syntax, fingerspelling, and grammatical non-manual signals. Focuses on communicative competence. Develops gestural skills as a foundation for ASL enhancement. Introduces cultural knowledge and increases understanding of the Deaf Community. Lecture 3 hours per week.

ASL 201 American Sign Language III (3 CR) Prerequisites: ASL 102. Develops vocabulary, conversational competence, and grammatical knowledge with a total immersion approach. Introduces increasingly complex grammatical aspects including those unique to ASL. Discusses culture and literature. Contact with the Deaf Community is encouraged to enhance linguistic and cultural knowledge. Lecture 3 hours per week.

AST – ADMINISTRATIVE SUPPORT TECHNOLOGY

AST 101 Keyboarding I (3 CR) Teaches the alphanumeric keyboard with emphasis on correct techniques, speed, and accuracy. Teaches formatting of basic personal and business correspondence, reports, and tabulation. Lecture 3 hours per week.

AST 102 Keyboarding II (3 CR) Prerequisite: AST 101. Develops keyboarding and document production skills with emphasis on preparation of specialized business documents. Continues skill-building for speed and accuracy. Lecture 3 hours per week.

AST 107 Editing/Proofreading Skills (3 CR) Develops skills essential to creating and editing business documents. Covers grammar, spelling, diction, punctuation, capitalization, and other usage problems. Lecture 3 hours per week.

AST 113 Keyboarding for Speed and Accuracy (1 CR) Prerequisite: AST 101 or equivalent. Focuses on improving keyboarding speed and accuracy through assigned exercises that diagnose problem areas. Emphasizes increased productivity through improved speed and accuracy. Lecture 1 hour per week.

AST 114 Keyboarding for Information Processing (2 CR) Teaches the alphabetic and numeric keys; develops correct techniques and competency in the use of computer keyboards. May include basic correspondence and report formats. Lecture 2 hours per week.

AST 117 Keyboarding for Computer Usage (1 CR) Teaches the alphabetic keyboard and 10-key pad. Develops correct keying techniques in a few short lessons. If you have been using the “two-fingered hunt-and-peck” method, this class is for you. Designed for beginners of all ages. Lecture 1 hour per week.

AST 132 Word Processing I (Word 2013) (1 CR) Prerequisite: Preferred knowledge or experience with MS Windows and keyboarding. Presents formatting and editing features of a word processing program. Course to include the basics of word processing using Microsoft Word 2013's latest software. Learn to proficiently

create professionally formatted and richly illustrated documents. Apply artistic effects for both pictures and text. Learn how to format text, use tabs, copying and moving text, inserting screenshots and pictures, work with Themes/Styles, work with smart elements and more. Lecture 1 hour per week.

AST 141 Word Processing I (Microsoft® Word) (3 CR) Prerequisite: AST 101 or equivalent. Teaches creating and editing documents, including line and page layouts, columns, fonts, search/replace, cut/paste, spell/thesaurus, and advanced editing/formatting features of word processing software. Lecture 3 hours per week.

AST 147 Introduction to Presentation Software (PowerPoint 2013) (1 CR) Prerequisite: Preferred knowledge or experience with MS Windows and keyboarding. Introduces presentation options including slides, transparencies, and other forms of presentations. Create a presentation with style and make it come alive! Course content includes the “new” and improved Ribbon, formatting text and graphics, working with tables and charts, applying transitions and animations, adding multimedia features and more to create and customize effective, finished presentations. Lecture 1 hour per week.

AST 154 Voice Recognition Applications (1 CR) Teaches the computer user to use the voice as an input device to compose documents and to give commands directly to the computer. Lecture 1 hour per week.

AST 205 Business Communication (3 CR) Prerequisites: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all required developmental English requirements. Teaches techniques of oral and written communications. Emphasizes writing and presenting business-related materials. Lecture 3 hours per week.

AST 232 Microcomputer Office Application (3 CR) Prerequisites: AST 101 and AST 141. Teaches production of business documents using presentations, word processing, databases, and spreadsheets. Emphasizes document production to meet business and industry standards. Lecture 3 hours per week.

AST 236 Specialized Software Applications Microsoft Office 2013 (3 CR) Prerequisite: AST 101. Teaches specialized integrated software applications on the microcomputer using web page design and desktop publishing. Emphasizes document production to meet business and industry standards. Lecture 3 hours per week.

AST 238 Word Processing Advanced Operations (3 CR) Prerequisite: AST 141. Teaches advanced word processing features including working with merge files, macros, and graphics; develops competence in the production of complex documents. Lecture 3 hours per week.

AST 243 Office Administration I (3 CR) Prerequisite: AST 101. Develops an understanding of the administrative support role and the skills necessary to provide organizational and technical support in a contemporary office setting. Emphasizes the development of critical-thinking, problem-solving, and job performance skills in a business office environment. Lecture 3 hours per week.

AST 244 Office Administration II (3 CR) Prerequisite: AST 243 or equivalent. Enhances skills necessary to provide organizational and technical support in a contemporary office setting. Emphasizes administrative and supervisory role of the office professional. Includes travel and meeting planning, office budgeting and financial procedures, international issues, and career development. Lecture 3 hours per week.

AST 253 Advanced Desktop Publishing I Microsoft Office 2013 (3 CR) Prerequisite AST 101 or equivalent and experience in using a word processing package. Introduces specific desktop publishing software. Teaches document layout and design, fonts, type styles, style sheets, and graphics. Lecture 3 hours per week.

AUB - AUTO BODY

AUB 116 Auto Body Repair (4 CR) Teaches collision straightening procedures and use of equipment, planning repair procedures, disassembly techniques, body fastening systems, glass removal and replacement and panel repair and alignment. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT – AUTOMOTIVE ANALYSIS AND REPAIR

AUT 101 Introduction to Automotive Systems (4 CR) Introduces fundamental systems of automobile, the engine fuel, exhaust, electric, ignition, lubrication, cooling, transmission, steering, brake and suspension systems. Teaches theory and function of each system. Demonstrates operation. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT 126 Auto Fuel and Ignition Systems (5 CR) Prerequisite: AUT 241. Studies automobile ignition and fuel systems, their functions in operation of engine. Includes carburetors, fuel pumps, ignition systems, troubleshooting, engine test and adjustment, tune-up. Lecture 4 hours. Laboratory 3 hours. Total 7 hours per week.

AUT 241 Automotive Electricity I (4 CR) Introduces electricity and magnetism, symbols, and circuitry as applied to the alternators, regulators, starters, lighting systems, instruments, and gauges and accessories. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT 251 Automatic Transmissions (3 CR) Studies several types of automatic transmissions, torque converters, and their principles of operation. Includes adjustment, maintenance, and rebuilding. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AUT 265 Automotive Braking System (4 CR) Presents operation, design, construction, repair, and servicing of braking system, including anti-lock brake systems (ABS). Explains uses of tools and test equipment, evaluation of test results, estimation of repair cost for power, standard, and disc brakes. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT 266 Auto Alignment, Suspension and Steering (4 CR) Introduces use of alignment equipment in diagnosing, adjusting, and repairing front and rear suspensions. Deals with repair and servicing of power and standard steering systems. Lecture 1 hour. Laboratory 6 hours. Total 7 hours per week.

BIO - BIOLOGY

BIO 1 Foundations of Biology (4 CR) Develops a basic understanding of plant and animal form, function, and relationships. Prepares students who have a deficiency in high school biology. May be repeated for credit. Credit is not applicable toward graduation or transfer. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

BIO 101 General Biology I (4 CR) Prerequisite: Successful completion of MTE 1, 2, 3, 4, and 5, and a placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. 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. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

BIO 102 General Biology II (4 CR) Prerequisite: BIO 101. 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. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

BIO 140 - Human Anatomy and Physiology (6 CR) Provides comprehensive and systematic study of anatomy and physiology of the normal human body. Lecture 5 hours. Recitation and laboratory 3 hours. Total 8 hours per week.

BIO 141 Human Anatomy and Physiology I (4 CR) Prerequisite: BIO 101 or high school Biology within the past 5 years; an ENG 111 placement recommendation, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Integrates anatomy and physiology of cells, tissues, organs, and systems of the body. Integrates concepts of chemistry, physics and pathology. Lecture 3 hours per week. Laboratory 3 hours per week. Total 6 hours per week.

BIO 142 Human Anatomy and Physiology II (4 CR) Prerequisite: BIO 141 or equivalent; an ENG 111 placement recommendation, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Integrates anatomy and physiology of cells, tissues, organs, and systems of the human body. Integrates concepts of chemistry, physics and pathology. Lecture 3 hours per week. Laboratory 3 hours per week. Total 6 hours per week.

BIO 145 Human Anatomy and Physiology for the Health Sciences (4 CR) Introduces human anatomy and physiology primarily to those planning to pursue an AAS degree in nursing or other allied health professions. Covers basic chemical concepts, cellular physiology, as well as the anatomy and physiology of human organ systems. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

BIO 193 Studies in Human Anatomy & Physiology (4 CR) Presents a concise overview of anatomy and physiology, encompassing the musculoskeletal system and organ systems of the human body. Studying the systems at the cellular and gross level with an introduction to disease states. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

BIO 205 - General Microbiology (4 CR) Prerequisites: One year of college biology and one year of college chemistry or divisional approval; an ENG 111 placement recommendation, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Examines morphology, genetics, physiology, ecology, and control of microorganisms. Emphasizes application of microbiological techniques to selected fields. Focuses on human pathogens and the process of pathogenicity. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

BIO 206 Cell Biology (4 CR) Prerequisite: BIO 101 and CHM 111. Introduces the ultrastructure and functions of cells. Emphasizes cell metabolism, cell division, and control of gene expression. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

BIO 215 Plant Life of Virginia (3 CR) Focuses on identification and ecological relationships of the native plants of Virginia. Emphasizes shrubs, vines, weeds, wildflowers, ferns, and mushrooms. Lecture 2 hours. Recitation and laboratory 3 hours. Total 5 hours per week.

BIO 220 Immunology (3 CR) Prerequisites: BIO 101 or equivalent and BIO 150, BIO 205 or equivalent. Provides students with an in-depth understanding of the mammalian immune system. Students begin with a detailed study of the immune system components and move on to an integrated look at the immune response with respect to clinical applications and human health. Lecture 3 hours per week.

BIO 270 General Ecology (4 CR) Prerequisite: BIO 101-102 or division approval. Studies interrelationships between organisms and their natural and cultural environments with emphasis on populations, communities, and ecosystems. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

BIO 271 Introduction to Ecological Systems (4 CR) Prerequisites: BIO 101. Examines the basic biological, meteorological and geologic/geographic factors at play in determining various critical ecosystems. Emphasis on wetlands and wetlands reconstruction, endangered and threatened species habitats, and aquatic systems. Remote sensing technology and use of GIS in ecological management will be examined. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

BIO 285 Biological Problems in Contemporary Society (3 CR) Discusses major biological problems facing society, which may include environmental and health concerns such as pollution, bioengineering, drug abuse, conservation, famine and others. Lecture 3 hours per week.

BIO 298 Seminar and Project (1-5 CR) 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.

BLD - BUILDING

BLD 110 - Introduction to Construction (3 CR) Covers basic knowledge and requirements needed in the construction trades. Introduces use of tools and equipment, with emphasis on construction safety, including personal and tool safety. Provides a working introduction to basic blueprint reading and fundamentals of construction mathematics. Lecture 3 hours per week.

BLD 111 Blueprint Reading and the Building Code (3 CR) Introduces reading and interpreting various kinds of blueprints and working drawings with reference to local, state and national building codes. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

BLD 159 Mechanical Code and Certification Preparation (3 CR) Discusses local, state, and national building codes as they relate to the installation, maintenance and repair of mechanical systems in residential and commercial buildings. Includes gas and oil burners, venting, flues and sizing of systems. Lecture 3 hours per week.

BCS – BROADCASTING

BCS 110 Fundamentals in Video Production (4 CR) Studies the use of video equipment and the application of production techniques and aesthetics in electronic media, and develops fundamental production skills through hands on experience with cameras, video tape records, video switcher, graphic computers, and lighting instruments. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

BCS 117 Electronic Journalism (3 CR) Prerequisite: ENG 111. Teaches and provides practical training in electronic news reporting, writing, editing, and stacking (organization). Studies electronic news ethics and responsible news gathering and reporting in a free society. Lecture 3 hours per week.

BCS 140 Introduction to Mass Media (3 CR) Studies the development of mass media communication, including the history and technological evolution of print and electronic media. Emphasizes mass communication in the United States. Lecture 3 hours per week.

BUS – BUSINESS MANAGEMENT AND ADMINISTRATION

BUS 100 Introduction to Business (3 CR) 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 CR) Teaches the fundamentals of supervision, including primary responsibilities of supervisors. Introduces factors relating to the work of supervisor and subordinates. Covers aspects of leadership, job management, work improvement, training/orientation, performance evaluation, and effective employee/ supervisor relationships. Lecture 3 hours per week.

BUS 116 Entrepreneurship (3 CR) 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 CR) Prerequisite: MTE 1, 2 and 3. 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 profits 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 CR) Prerequisite or corequisite: ACC 110 or ACC 211. 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 CR) 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 202 Applied Management Principles (3 CR) Prerequisite: BUS 100, BUS 111 or BUS 200. Focuses on management practices and issues. May use case studies and/or management decision models to analyze problems in developing and implementing a business strategy while creating and maintaining competitive advantage. Lecture 3 hours per week.

BUS 205 Human Resource Management (3 CR) 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 221 Business Statistics I (3 CR) Prerequisite: MTH 163 or divisional approval. Focuses on statistical methodology in the collection, organization, presentation, and analysis of data; concentrates on measures of central tendency, dispersion, probability concepts and distribution, sampling, statistical estimation, normal and T distribution and hypotheses for means and proportions. Lecture 3 hours per week.

BUS 222 Business Statistics II (3 CR) Prerequisite BUS 221 or division approval. Continues study of inferential statistics and application of statistical techniques and methodology in business. Includes analysis of variance, regression and correlation measurement of business and economic activity through the use of index numbers, trend, cyclical, and seasonal effects and the Chi-Square distribution and other non-parametric techniques. Lecture 3 hours per week.

BUS 225 Applied Business Statistics (3 CR) Prerequisites: MTH 120 and BUS 125. 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. Lecture 3 hours per week.

BUS 241 Business Law I (3 CR) 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 285 - Current Issues in Management (3 CR) Pre/Corequisite: BUS 205. Designed as a capstone course for management majors, the course is designed to provide an integrated perspective of the current issues and trends in business management. Contemporary issues will be explored in a highly participatory class environment. Lecture 3 hours per week.

CHD – EARLY CHILDHOOD DEVELOPMENT

CHD 118 Language Arts for Young Children (3 CR) Emphasizes the early development of children's language and literacy skills. Presents techniques and methods for supporting all aspects of early literacy. Surveys children's literature, and examines elements of promoting oral literacy, print awareness, phonological awareness, alphabetic principle, quality story-telling and story reading. Addresses strategies for intervention and support for exceptional children and English Language Learners. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

CHD 119 Introduction to Reading Methods (3 CR) Prerequisite: ENG 111. Focuses on promoting language and literacy skills as the foundation for emergent reading. Emphasizes phonetic awareness and alphabetic principle, print awareness and concepts, comprehension and early reading and writing. Addresses strategies for intervention and support for exceptional children and English Language Learners. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

CHD 120 Introduction to Early Childhood Education (3 CR) Introduces early childhood development through activities and experiences in early childhood, 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 Teaching Art, Music, and Movement to Children (3 CR) Focuses on children's exploration, play and creative expression in the areas of art, music and movement. Emphasis will be on developing strategies for using various open-ended media representing a range of approaches in creative thinking. Addresses strategies for intervention and support for exceptional children and English Language Learners. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

CHD 146 Math, Science, and Social Studies for Children (3 CR) Provides experiences in content, methods, and materials for the development of math, science, and social studies skills in children. Emphasis will be on developing strategies for using various resources to facilitate children's construction of knowledge. Addresses strategies for intervention and support for children with special needs and English Language Learners. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

CHD 165 Observation and Participation in Early Childhood/ Primary Settings (3 CR) Prerequisites or corequisites: CHD 120 and CHD 215 or divisional approval. Focuses on observation as the primary method for gathering information about children in early childhood settings. Emphasizes development of skills in the implementation of a range of observation techniques. Students spend one hour each week in a seminar session in addition to 4 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 CR) Examines child growth and development from birth to 36 months. Focuses on development in the physical, cognitive, social, emotional, and language domains. Emphasizes the importance of the environment and relationships for healthy brain development during the child's first three years of life. Investigates regulatory standards for infant/toddler caregiving. Lecture 3 hours per week.

CHD 205 Guiding the Behavior of Children (3 CR) Explores the role of the early childhood educator in supporting emotional and social development of children, and in fostering a sense of community. Presents practical strategies for encouraging prosocial behavior, conflict resolution and problem solving. Emphasizes basic skills and techniques in child guidance. Lecture 3 hours per week.

CHD 210 Introduction to Exceptional Children (3 CR) Reviews the history of and legal requirements for providing intervention and educational services for young children with special needs. Studies the characteristics of children with a diverse array of needs and developmental abilities. Explores concepts of early intervention, inclusion, guiding behavior and adapting environments to meet children's needs. Lecture 3 hours per week.

CHD 215 Models of Early Childhood Education Programs (3 CR) Surveys and discusses various models and theories of early childhood education programs including current trends and issues. Reviews state licensing and staff requirements. Lecture 3 hours per week.

CHD 216 Early Childhood Programs, School, and Social Change (3 CR) Explores methods of developing positive, effective relations with families to enhance their developmental goals for children. Considers culture and other diverse needs, perspectives, and abilities of families and educators. Emphasizes advocacy and public policy awareness as an important role of early childhood educators. Describes risk factors and identifies community resources. Lecture 3 hours per week.

CHD 265 Advanced Observation and Participation in Early Childhood Primary Settings (3 CR) Prerequisites: CHD 120, CHD 165 and CHD 215 or divisional approval. Focuses on implementation of activity planning and observation of children through participation in early childhood settings. Emphasizes responsive teaching practices and assessment of children's development. Reviews legal and ethical implications of working with children. Lecture 1 hour. Laboratory 4 hours. Total 5 hours per week.

CHD 270 Administration of Early Childhood Programs (3 CR) Examines 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 Project in Portfolio Development (1 CR) Prerequisites: CHD 118, CHD 120, CHD 145-146, CHD 165-166, CHD 210, CHD 215-216, and CHD 270. Corequisites: CHD 119, CHD 205 and CHD 265. This is considered a capstone course and will require cumulative work from previous courses. Focuses on the development of a portfolio to demonstrate professional competence in the field of early care and education. Lecture 1 hour per week.

CHM - CHEMISTRY

CHM 5 Developmental Chemistry for Health Sciences (4 CR) Prerequisites: MTE 1, 2, 3, 4, 5 and 6; and a placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Introduces basic principles of inorganic, organic, and biological chemistry. Emphasizes applications to the health sciences. Can be used as a preparatory course for CHM 111- 112. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

CHM 111 College Chemistry I (4 CR) Prerequisites: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9; and a placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. High school chemistry or CHM 5 recommended but not required. Explores the fundamental laws, theories, and mathematical concepts of chemistry. Designed primarily for science and engineering majors. Requires a strong background in mathematics. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

CHM 112 College Chemistry II (4 CR) Prerequisite: CHM 111. Explores the fundamental laws, theories, and mathematical concepts of chemistry. Designed primarily for science and engineering majors. Requires a strong background in mathematics. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

CHM 241 Organic Chemistry I (3 CR) Prerequisite: CHM 112 or equivalent. Introduces fundamental chemistry of carbon compounds, including structures, physical properties, syntheses, and typical reactions. Emphasizes reaction mechanisms. Lecture 3 hours per week.

CHM 242 Organic Chemistry II (3 CR) Prerequisite: CHM 241. Introduces fundamental chemistry of carbon compounds, including structures, physical properties, syntheses, and typical reactions. Emphasizes reaction mechanisms. Lecture 3 hours per week.

CHM 245 Organic Chemistry Laboratory I (2 CR) Prerequisite: CHM 112. Corequisite: CHM 241. Includes qualitative organic analysis. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

CHM 246 Organic Chemistry Laboratory II (2 CR) Prerequisite: CHM 241 and CHM 245. Corequisite: CHM 242. Includes qualitative organic analysis. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

CHM 260 Introductory Biochemistry (3 CR) Prerequisite CHM 112 or divisional approval. Explores fundamentals of biological chemistry. Includes study of macromolecules, metabolic pathways, and biochemical genetics. Lecture 3 hours per week.

CHM 261 Biochemistry Lab (1 CR) Corequisite: CHM 260. Provides hands on lab experiences designed to reinforce the fundamentals of biological chemistry taught in CHM 260 such as biochemistry assays, enzyme kinetics, enzyme purification, chromatography, electrophoresis and use of western blots. Laboratory 3 hours per week.

CIV - CIVIL ENGINEERING TECHNOLOGY

CIV 135 Construction Management and Estimating (3 CR) Teaches the equipment and methods used in construction. Includes principles and economics of construction, planning and management, and principles of estimating primarily using highway and building project examples. Lecture 3 hours per week.

CIV 171 Surveying I (3 CR) Prerequisite: MTH 115 or division approval. Introduces surveying equipment, procedures and computations including adjustment of instruments, distance measurement, leveling, angle measurement, traversing, traverse adjustments, area computations and introduction to topography. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

CSC - COMPUTER SCIENCE

CSC 201 Computer Science I (4 CR) Corequisites: CSC 100 or equivalent or divisional approval and MTH 173 or equivalent (MTH

175) or divisional approval. Introduces algorithm and problem-solving methods. Emphasizes structured programming concepts, elementary data structures and the study and use of a high level programming language. Lecture 4 hours per week.

CSC 202 Computer Science II (4 CR) Prerequisite: CSC 201. Corequisite: MTH 174 or equivalent (MTH 176) or divisional approval. Examines data structures and algorithm analysis. Covers data structures (including sets, strings, stacks, queues, arrays, records, files, linked lists, and trees), abstract data types, algorithm analysis (including searching and sorting methods), and file structures. Lecture 4 hours per week.

CSC 205 Computer Organization (4 CR) Examines the hierarchical structure of computer architecture. Focuses on multi-level machine organization. Uses a simple assembler language to complete programming projects. Includes processors, instruction, execution, addressing techniques, data representation and digital logic. Lecture 4 hours per week.

CST – COMMUNICATION STUDIES AND THEATRE

CST 100 Principles of Public Speaking (3 CR) Applies theory and principles of public address with emphasis on preparation and delivery. Lecture 3 hours per week.

CST 105 Oral Communication (3 CR) Studies effective communication with emphasis on speaking and listening. Lecture 3 hours per week.

CST 130 Introduction to the Theatre (3 CR) 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 CR, 3 CR) Prerequisite for CST 132: CST 131. 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 141 Theatre Appreciation I (3 CR) Aims to increase knowledge and enjoyment of theatre. Considers process, style, organization, written drama, and performed drama. Part I of II. Lecture 3 hours per week.

CST 145 Stagecraft (3 CR) Acquaints the student with fundamental methods, materials, and techniques of set construction for the stage. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

DNH – DENTAL HYGIENE

DNH 111 Oral Anatomy (2 CR) Studies the morphology and function of the oral structures with emphasis on the primary and permanent dentition, eruption sequence, occlusion, and intra-arch relationships. Lecture 2 hours per week.

DNH 115 Histology/Head and Neck Anatomy (3 CR) Presents a study of the microscopic and macroscopic anatomy and physiology of the head, neck, and oral tissues. Includes embryologic development and histologic components of the head, neck, teeth, and periodontium. Lecture 3 hours per week.

DNH 120 Management of Emergencies (2 CR) Studies the various medical emergencies and techniques for managing emergencies in the dental setting. Additional practical applications and simulations

of emergencies may be conducted to enhance basic knowledge from the one hour lecture component. Lecture 2 hours per week.

DNH 130 Oral Radiography for the Dental Hygienist (3 CR) Studies radiation physics, biology, safety, and exposure techniques for intra- and extra-oral radiographic surveys. Laboratory provides practice in exposure, processing methods, mounting, and interpretation of normal findings. Lecture 2 hour. Laboratory 3 hours. Total 5 hours per week.

DNH 141 Dental Hygiene I (5 CR) Introduces clinical knowledge and skills for the performance of dental hygiene services; basic skill components, lab manikins, and client practice. Lecture 3 hours. Clinic 6 hours. Total 9 hours per week.

DNH 142 Dental Hygiene II (5 CR) Prerequisite: DNH 141. Exposes students to instrument sharpening, time management, and client education techniques and methods. Provides supervised clinical practice in the dental hygiene clinic with emphasis on developing client treatment and instrument skills. Lecture 2 hours. Clinic 9 hours. Total 11 hours per week.

DNH 145 General and Oral Pathology (2 CR) Prerequisite: DNH 115. Introduces general pathology with consideration of the common diseases affecting the human body. Particular emphasis is given to studying pathological conditions of the mouth, teeth, and their supporting structures. Lecture 2 hours per week.

DNH 146 Periodontics for Dental Hygienist (2 CR) Introduces the theoretical and practical study of various concepts/methods used in describing, preventing, and controlling periodontal disease. Presents etiology, microbiology, diagnosis, treatment and prognosis of diseases. Lecture 2 hours per week.

DNH 150 Nutrition (2 CR) Studies nutrition as it relates to dentistry and general health. Emphasizes the principles of nutrition as applied to the clinical practice of dental hygiene. Lecture 2 hours per week.

DNH 196 On-Site Training (3 CR) Prerequisite: DNH 142. Specializes in career orientation and training program without pay in selected businesses and industry, supervised and coordinated by the college. Continues supervised clinical practice in the dental hygiene clinic with emphasis on coordinating didactic and clinical skills, and refining client treatment skills. Introduces special needs clients and treatment modifications. Lecture 2 hours. Clinic 3 hours. Total 5 hours per week.

DNH 214 Practical Materials for Dental Hygiene (2 CR) Studies the current technologic advances, expanded functions, and clinical/laboratory materials used in dental hygiene practice. Provides laboratory experience for developing skills in the utilization and applications of these technologies and functions. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

DNH 216 Pharmacology (2 CR) Studies the chemical and therapeutic agents used in dentistry, including their preparation, effectiveness, and specific application. Lecture 2 hours per week.

DNH 226 Public Health Dental Hygiene I (2 CR) Studies and compares concepts of delivery of health care, applying the public health delivery model. Utilizes epidemiologic methods, research and biostatistics as applied to oral health program planning, implementation, and evaluation. Incorporates and applies current health issues and trends. Lecture 2 hours per week.

DNH 227 Public Health Dental Hygiene II (1 CR) Prerequisite: DNH 226. Applies concepts of public health program planning through student directed community projects with an emphasis on preventive oral health education. Includes development of table clinics, bulletin boards, and volunteer service in the community. Laboratory 3 hours per week.

DNH 230 Office Practice and Ethics (1 CR) Studies the principles of dental ethics and economics as they relate to the dental hygienist. The course also includes a study of jurisprudence and office procedures. Lecture 1 hour per week.

DNH 235 Management of Dental Pain and Anxiety in the Dental Office (2 CR) Prerequisites: DNH 115, DNH 120, and DNH 216. Provides a study of anxiety and pain management techniques used in dental care. Students will understand the necessary theory to appropriately treat, plan and successfully administer topical anesthesia, local anesthesia, and nitrous oxide/oxygen analgesia. Includes the components of pain, pain control mechanisms, topical anesthesia, local anesthesia and nitrous oxide/oxygen analgesia. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

DNH 244 Dental Hygiene IV (5 CR) Prerequisite: DNH 190. Introduces advanced skills and the dental hygienists role in dental specialties. Includes supervised clinical practice in the dental hygiene clinic and/or off-campus clinical rotations at various community facilities. Emphasizes treatment of clients demonstrating periodontal involvement, stressing application and correlation of knowledge and skills from previous semesters. Lecture 1 hour. Clinic 12 hours. Total 13 hours per week.

DNH 245 Dental Hygiene V (5 CR) Prerequisite: DNH 244. Exposes student to current advances in dentistry. Includes supervised clinical practice in the dental hygiene clinic and/or off-campus clinical rotations at various community facilities. Emphasis is placed on synthesis of knowledge from previous semesters, treatment of clients with moderate to advanced periodontal involvement, and improving clinical speed while maintaining quality in preparation for practice. Lecture 1 hour. Clinic 12 hours. Total 13 hours per week.

DRF - DRAFTING

DRF 128 Geometric Dimensioning and Tolerancing (3 CR) Prerequisite: DRF 201 or divisional approval. Teaches use of a positional tolerance system, its relationship to coordinate tolerance systems, and other aspects of industry standard drafting practices based on the current ASME Y14.5 standard. Covers the standard dimensioning practices in the architectural, civil, mechanical, electrical and other industries. Lecture 3 hours per week.

DRF 161 Blueprint Reading I (2 CR) Teaches the application of basic principles, visualization, orthographic projection, detail of drafting shop process and terminology, assembly drawings and exploded views. Considers dimensioning, changes, and corrections, classes of fits, tolerances and allowances, sections and convention in blueprint reading. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

DRF 201 Computer Aided Drafting and Design I (3 CR) Prerequisite: Basic computer knowledge including file management, mouse usage, and keyboarding skills; MTE 1, 2 and 3 or divisional approval. Teaches computer-aided drafting concepts and equipment designed to develop a general understanding of components of a typical CAD system and its operation. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

DRF 202 Computer Aided Drafting and Design II (3 CR) Prerequisite: DRF 201 or divisional approval. Teaches production drawings and advanced operations in computer aided drafting. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

DRF 203 Computer Aided Drafting and Design III (3 CR) Prerequisite: DRF 202 or divisional approval. Teaches advanced CAD applications. Includes customization and/or use of advanced software. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

DRF 226 Computer Aided Machining (3 CR) Prerequisite: MEC 119 or divisional approval. Teaches use of software to create numerical machine code to drive CNC milling machines or lathes. Introduces software and techniques to create, edit and produce CAD drawings, tool paths, and the numerical code for a CAM machine. Includes history, applications, hardware and software requirements, terminology, limitation and future trends. Reviews and builds on manual CNC programming methods. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

See Early Childhood Development (CHD) ECO - ECONOMICS

ECO 120 Survey of Economics (3 CR) 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 CR) Introduces macroeconomics including the study of Keynesian, classical, monetarist principles and theories, the study of national economic growth, inflation, recession, unemployment, financial markets, money and banking, the role of government spending and taxation, along with international trade and investments. Lecture 3 hours per week.

ECO 202 Principles of Microeconomics (3 CR) Introduces the basic concepts of micro-economics. 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.

EDU - EDUCATION

EDU 100 Introduction to Education (1 CR) Provides an overview of teaching as a career with orientation to theories, practices, responsibilities, guidelines, current trends, and issues in education. Lecture 1 hour per week.

EDU 114 Driver Task Analysis (3 CR) Prerequisite: Must be eligible for ENG 03 and 05 or ESL 13. 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 214 - Instructional Principles of Driver Education (3 CR) Prerequisite: EDU 114. 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. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

EDU 287 Instructional Design for Online Learning (3 CR) Prepares educators to design online courses that encourage active learning and student participation. Focuses on instructional design practices including the development of content tied to learning objectives and a peer-based approach to evaluating courses. Lecture 3 hours per week.

EGR - ENGINEERING

EGR 105 Introduction to Problem Solving in Technology (1 CR) Teaches engineering problem solving, using hand held calculator. Applies computers to solving problems. Laboratory 3 hours per week.

EGR 120 Introduction to Engineering (2 CR) Prerequisite: EGR 124. 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 such as Inventor, MATLAB, Excel, and LabVIEW. Lecture 2 hours per week.

EGR 123 Introduction to Engineering Design (2 CR) Introduces the fundamental knowledge and experience needed to understand the engineering design process through the basics of electrical, computer, and mechanical systems. Includes the completion of a project in which a specific electromechanical robot kit will be analyzed, assembled, and operated. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

EGR 124 Introduction to Engineering and Engineering Methods (3 CR) Corequisites: MTH 173. Introduces the engineering profession, professionalism, and ethics. Covers problem presentation, engineering calculations, digital computer applications, word processing, worksheets, programming in FORTRAN or C++ and elementary numerical methods. Lecture 3 hours per week.

EGR 126 Computer Programming for Engineers (3 CR) Corequisite: MTH 116 or equivalent. Introduces computer, 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 per week.

EGR 140 Engineering Mechanics – Statics (3 CR) Prerequisite: MTH 173 or equivalent. 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 multiforce members and friction and internal forces. Lecture 3 hours per week.

EGR 206 Engineering Economy (3 CR) Corequisite: MTH 174 or equivalent. Presents economic analysis of engineering alternatives. Studies economic and cost concepts, calculation of economic equivalence, comparison of alternatives, replacement economy, economic optimization in design and operation, depreciation, and after tax analysis. Lecture 3 hours per week.

EGR 216 Computer Methods in Engineering and Technology (3 CR) Prerequisite: Basic computer knowledge including file management, mouse usage, and keyboarding skills. Corequisite: MTH 115. 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 CR) Prerequisite: EGR 140. 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 CR) Prerequisite: EGR 140. 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 251 Basic Electric Circuits I (3 CR) Prerequisite: MTH 174 and Corequisite: EGR 255. Teaches fundamentals of electric circuits. Includes circuit quantities of charge, current, potential, power and energy. Teaches resistive circuit analysis; Ohm's and Kirchoff's laws; nodal and mesh analysis; network theorems; RC, RL and RLC circuit transient response with constant forcing functions. Teaches AC steady-state analysis, power, and three-phase circuits. Presents frequency domain analysis, resonance, Fourier series, inductively coupled circuits, Laplace transform applications, and circuit transfer functions. Introduces problem solving using computers. Lecture 3 hours per week.

EGR 255 Electric Circuits Laboratory (1 CR) Corequisite: EGR 251. Teaches principles and operation of laboratory instruments such as VOM, electronic voltmeters, digital multimeters, oscilloscopes, counters, wave generators and power supplies. Presents application to circuit measurements, including transient and steady-state response of simple networks with laboratory applications of laws and theories of circuits plus measurement of AC quantities. Laboratory 3 hours per week.

EGR 285 Capstone Project (1 CR) Prerequisite: IND 290. Provides a capstone research project for the final semester of the program, focusing inquiry upon an area of interest to the student or area relevant to their prospective career field. May include problem based research topics, internships, or other focused projects. Lecture 1 hour per week.

ELE – ELECTRICAL TECHNOLOGY

ELE 110 Home Electric Power (3 CR) Corequisite: ELE 133 or divisional approval. Covers the fundamentals of residential power distribution, circuits, panels, fuse boxes, breakers, and transformers. Includes study of the national electrical code, purpose, and interpretation. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ELE 130 Electricity (4 CR) Prerequisite: MTE 1, 2 and 3. Covers DC and AC theory (FOR NON-ELECTRICAL STUDENTS), with some introduction to electrical machines. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ELE 133-134 Practical Electricity I-II (3 CR, 3 CR) Prerequisite: MTE 1, 2 and 3. Teaches the fundamentals of electricity, terminology, symbols, and diagrams. Includes principles essential to understanding general practices, safety, and the practical aspects of residential and non-residential wiring and electrical installation, including fundamentals of motors and controls. May require preparation of a report as an out-of-class activity. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ELE 138 National Electrical Code (2 CR) Prerequisite: ELE 133 or divisional approval. Teaches purpose and interpretation of the National Electrical Code as well as familiarizations with various charts, code rulings, and wiring methods. Prepares the student to take the Journeyman-Level Exam. Lecture 2 hours per week.

ELE 147 Electrical Power and Control Systems (3 CR) Prerequisite: ELE 130, ELE 134 or equivalent. Reviews basic DC and AC circuits. Covers single-phase and three-phase AC power distribution systems, and protection devices, including types of AC motors. Presents analyzing and troubleshooting electrical control systems and motor protection devices. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ELE 159 Electrical Motors (3 CR) 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 176 Introduction to Alternative Energy Including Hybrid Systems (3 CR) Prerequisites: MTE 1, 2 and 3. Corequisite: ELE 130. Introduces Alternative Energy with an emphasis on solar photovoltaic systems, small wind turbines technology, the theory of PV technology, PV applications, solar energy terminology, system components, site analysis, PV system integration and PV system connections and small wind turbine technology site analysis. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ELE 177 - Photovoltaic Energy Systems (4 CR) Teaches techniques for conduct site surveys, installing system components, installing inverters and performing system sizing and system maintenance. Introduces different battery configurations, and charge controllers. Introduces safety, system design and layout, National Electric Code, Component Selection, wiring and installation techniques. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ELE 178 Wind Turbine Technology (4 CR) Introduces many facets of the wind industry. Introduces the history and development of the wind systems as well as the future of the wind industry as the desire for alternative energy grows. Presents the terminology used in the application of wind systems. Identifies the various types of wind energy turbines and other topics as appropriate. Includes safety training. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ELE 225 Electrical Control Systems (4 CR) Studies components, equipment and circuits that are used to control the operation of electrical machines. Explains the physical and operating characteristics of various electromagnetic, static, and programmable control devices. Investigates control schemes used to accomplish specific control objectives. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ELE 239 Programmable Controllers (3 CR) Prerequisite: ELE 147 and ETR 280 or ELE 133 and ETR 141, or divisional approval. Examines installation, programming, interfacing, and concepts

of troubleshooting programmable controllers. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ELE 293 Studies in Electrical Power and Control Systems (3 CR) Prerequisite: ETR 114. Studies the theory and operation of rotating machines, transformers, AC power distribution and control systems used in industrial applications. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ELE 298 Seminar and Project in Electrical Engineering (3 CR) 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. Lecture 3 hours per week.

EMS – EMERGENCY MEDICAL TECHNICIAN

EMS 100 CPR for Healthcare Providers (1 CR) Provides instruction in Cardiopulmonary Resuscitation that meets current Emergency Cardiac Care (ECC) guidelines for Cardiopulmonary Resuscitation education for Healthcare Providers. Equivalent to HLT 105. Lecture 1 hour per week.

EMS 105 Basic Medication Administration Procedures (1 CR) Covers basic theory and practical application of medication and drug dosage, as well as calculations. Direct application to the functional performance of the EMT Intermediate in the field and clinical settings is stressed. Lecture 1 hour per week.

EMS 110 Emergency Vehicle Operator's Course (EVOC) (1 CR) 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 (7 CR) Prerequisite: EMS 100 or equivalent or CPR certification at the Health Care Provider level. Co-requisite: EMS 120. 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. Lecture 5 hours. Laboratory 4 hours. Total 9 hours per week.

EMS 112 Emergency Medical Technician– Basic I (4 CR) 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 113 Emergency Medical Technician – Basic II (3 CR) Continues preparation of student for certification as a Virginia and/or National Registry EMT-Basic. Includes 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 2 hours. Laboratory 2 hours. Total 4 hours per week.

EMS 120 Emergency Medical Technician- Basic Clinical I (1 CR) 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. Laboratory 2 hours per week.

EMS 132 Vehicle Rescue (1 CR) Educates Fire and EMS personnel in basic vehicle rescue. Teaches safe and proficient techniques for using air, manual and hydraulic tools. Lecture 1 hour per week.

EMS 133 Rope Rescue I (1 CR) Educates the student in rope use, repelling, self-rescue, basic rigging, and victim access. Emphasizes safe and effective rigging procedures. Lecture 1 hour per week.

EMS 151 Introduction to Advanced Life Support (4 CR)
Corequisite: EMS 170. 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 to a minimum to the Virginia Office of Emergency Medical Services curriculum. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

EMS 153 Basic ECG Recognition (2 CR) 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 dysrhythmias determination and introduction to 12 lead ECG. Lecture 2 hours per week.

EMS 155 ALS – Medical Care (4 CR) Prerequisites: Current EMT-B certification, EMS 151, and EMS 153. 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. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

EMS 157 ALS – Trauma Care (3 CR) Prerequisites: Current EMT-B certification and EMS 151. 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. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

EMS 159 ALS – Special Populations (3 CR) Prerequisites: EMS 151 and EMS 153. Pre- or corequisite: EMS 155. 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. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

EMS 170 ALS Internship (1 CR) 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. Laboratory 3 hours per week.

EMS 172 ALS Clinical Internship II (1 CR) Corequisite: EMS 151. 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. Laboratory 3 hours per week.

EMS 173 ALS Field Internship II (1 CR) Continues with the second in a series of field experiences providing supervised direct patient care in out-of-hospital advanced life support units. Laboratory 3 hours per week.

ENE – ENERGY TECHNOLOGY

ENE 100 Conventional and Alternate Energy Applications (4 CR)
Prerequisite: ELE 176 or divisional approval. Provides an overview of hydroelectric, coal, and nuclear energy production methods and renewable solar, geothermal, wind, and fuel cell technology. A complete system breakdown of conventional power production methods, efficiency, and sustainability when compared with solar, geothermal, wind, and fuel cell applications. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ENE 105 Solar Thermal Active and Passive Technology (4 CR)
Provides a comprehensive study of thermal technology as it applies to collector types and ratings, open-loop versus closed-loop and system sizing. Introduces hydronics, hot water, and pool heating applications. Provides an introduction to fluid dynamics and chemistry as it applies to system installation and maintenance. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ENF - ENGLISH FUNDAMENTALS

ENF 01 Preparing for College English I (8 CR) Prerequisite: Qualifying Placement Score; Corequisite: SDV 108. Provides integrated reading and writing instruction for students who require extensive preparation to succeed in college-level English courses. Students will place into this course based on placement test scores. 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 02 Preparing for College English II (4 CR) Prerequisite: Qualifying Placement Score; Corequisite: SDV 108. Provides integrated reading and writing instruction for students who require intermediate preparation to succeed in college-level English courses. Students will place into this course based on placement test scores. 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 4 hours per week.

ENF 03 Preparing for College English III (2 CR) Prerequisite: Qualifying Placement Score; Corequisite: SDV 108. Provides integrated reading and writing instruction for students who require minimal preparation to succeed in college-level English courses but still need some preparation to succeed. Students will place into this course based on placement test scores. Credit is not applicable toward graduation. Lecture 2 hours per week.

ENG – ENGLISH

ENG 111 College Composition I (3 CR) Prerequisites: A placement recommendation for ENG 111, co-enrollment in ENF 3 or successful completion of all developmental English requirements with a faculty recommendation for ENG 111. 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. Lecture 3 hours per week.

ENG 112 College Composition II (3 CR) Prerequisite: Successful completion of ENG 111 or its equivalent and must be able to use word processing software. 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. Lecture 3 hours per week.

ENG 135 Applied Grammar (3 CR) Prerequisite: Divisional approval. Develops ability to edit and proofread correspondence and other documents typically produced in business and industry. Instructs the student in applying conventions of grammar, usage, punctuation, **spelling, and mechanics. Lecture 3 hours per week.**

ENG 150 Children's Literature (3 CR) Surveys the history of children's literature, considers learning theory and developmental factors influencing reading interests, and uses bibliographic tools in selecting books/materials for recreational interests and educational needs of children. Lecture 3 hours per week.

ENG 210 Advanced Composition (3 CR) Prerequisite: ENG 112 or divisional approval. Helps students refine skills in writing non-fiction prose. Guides development of individual voice and style. Introduces procedures for publication. Lecture 3 hours per week.

ENG 211 Creative Writing I (3 CR) Prerequisite: ENG 112 or divisional approval. Introduces the student to the fundamentals of writing imaginatively. Students write in forms to be selected from poetry, fiction, drama, and essays. Lecture 3 hours per week.

ENG 215-216 Creative Writing – Fiction I-II (3 CR, 3 CR) Introduces the fundamentals and techniques of writing short and long fiction. Lecture 3 hours per week.

ENG 217-218 Creative Writing– Poetry I-II (3 CR, 3 CR) Introduces the fundamentals and techniques of writing poetry. Lecture 3 hours per week.

ENG 241-242 Survey of American Literature I-II (3 CR, 3 CR) Prerequisite: ENG 112 or divisional approval. Examines American literary works from colonial times to the present, emphasizing the ideas and characteristics of our national literature. Involves critical reading and writing. Lecture 3 hours per week.

ENG 243-244 Survey of English Literature I-II (3 CR, 3 CR) Prerequisite: ENG 112 or divisional approval. Studies major English works from Anglo-Saxon period to the present, emphasizing ideas and characteristics of the British literary tradition. Involves critical reading and writing. Lecture 3 hours per week.

ENG 251-252 Survey of World Literature I-II (3 CR, 3 CR) Prerequisite: ENG 112 or divisional approval. Examines major works of world literature. Involves critical reading and writing. Lecture 3 hours per week.

ENG 257 - Mythology (3 CR) Prerequisite: ENG 112 or divisional approval. Studies selected mythologies of the world, emphasizing their common origins and subsequent influence on human thought and expression. Involves critical reading and writing. Lecture 3 hours per week.

ENG 278 - Appalachian Literature (3 CR) Prerequisite: ENG 112 or divisional approval. Examines selected works of outstanding authors of the Appalachian region. Involves critical reading and writing. Lecture 3 hours per week.

ENV – ENVIRONMENTAL SCIENCE

ENV 110 Introduction to Water and Wastewater Treatment Tech (3 CR) Provides entry-level students with a general overview of the entire water supply, treatment, and disposal system. Traces water supply from raw state through treatment, storage, distribution, use, waste collection, and discharge back to the environment. Covers aspects of water supply and wastewater treatment. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ENV 115 Water Purification (3 CR) Prerequisite: ENV 110 and ENV 148 or divisional approval. Explores principles of water purification including secretion, sedimentation, rapid sand filtration, chlorination, treatment, and prevention of disease. Studies fundamentals of bacteriology, mycology, and parasitology, emphasizing their relationships to community health. Includes soil, water, wastewater, and industrial microbiology. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ENV 148 Math for Water and Wastewater Treatment Operations (3 CR) Prerequisite: MTE 1, 2, or a placement recommendation beyond MTE 2. Introduces students to basic math calculations relating to water and wastewater concepts and operations. Prepares students for Waterworks and Wastewater Works Operators certification exam. Lecture 3 hours per week.

ENV 149 Wastewater Treatment Plant Operation (3 CR) Prerequisite: ENV 110 and ENV 148 or divisional approval. Teaches principles, practices and desired function and operation of a variety of wastewater treatment unit processes. Evaluates the operation of processes by determination of the information and testing required for evaluation and performing the subsequent necessary calculations. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ENV 161 Introduction to Environmental Compliance (3 CR) Examines the statutory history of significant environmental legislation and the promulgation of rules and regulations attendant to these laws. Emphasis will be placed on 40 CFR and appropriate Virginia environmental code. Students will understand proper field techniques in sampling protocols for soil, water, and air. Lecture 3 hours per week.

ENV 162 Environmental Principles in Public Health (3 CR) Examines critical factors involved in environmental/ public health administration in the current post-911 society. Topics covered will include basic risk analysis and fate and transport modeling environmental microbiology and toxicology with implications on genetics, GIS, and bioterrorism/infectious diseases. Lecture 3 hours per week.

ETR – ELECTRONICS TECHNOLOGY

ETR 111 - Electronic Mathematics (3 CR) Studies electronic logic or computer technology. Includes a basic numbering system and Boolean algebra with applications to logic diagrams and circuits. May additionally cover mathematics by reviewing algebra and trigonometry fundamentals and applying those topics to practical electronics problems. Lecture 3 hours per week.

ETR 113 DC and AC Fundamentals I (4 CR) Prerequisite: MTE 1, 2 and 3. Studies DC and AC circuits, basic electrical components, instruments, network theorems, and techniques used to predict, analyze and measure electrical quantities. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 114 DC and AC Fundamentals II (4 CR) Prerequisite: ETR 113. Corequisite: MTH 115. Studies DC and AC circuits, basic electrical components, instruments, network theorems, and techniques used to predict, analyze and measure electrical quantities. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 123-124 Electronic Applications I-II (1 CR, 1 CR) Corequisite: ETR 141-142. Provides laboratory and shop experience as applied to basic electronic devices, circuits, and systems with emphasis on practical measurements. Laboratory 3 hours per week.

ETR 141-142 Electronics I-II (3 CR, 3 CR) Prerequisite: ETR 113 or ELE 133. Introduces electronic devices as applied to basic electronic circuits and systems. Lecture 3 hours per week.

ETR 237-238 Industrial Electronics I-II (4CR, 4CR) Studies linear integrated circuits for industrial applications, motors, industrial control devices, power control circuits, transducers, industrial process control, and sequential process control. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ETR 250 Solid State Circuits (4 CR) Prerequisite: Knowledge of DC/AC theory, and active devices and circuits, ETR 114 or equivalent. Teaches theory and application of amplifiers and oscillators. Includes amplifier circuit configurations, amplifier classes, operational amplifiers, power amplifiers, bandwidth distortion, and principles of feedback. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 261 Microprocessor Application I (3 CR) Prerequisite: ETR 280 or equivalent. Teaches the fundamentals of microprocessors including architecture, internal operations, memory, I/O devices machine level programming and interfacing. Emphasizes instrumentation and microprocessor. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

ETR 280 Introduction to Digital Logic Circuits and Computers (4 CR) Prerequisite ETR 113. Studies digital logic, Boolean algebra, and arithmetic circuits, using standard integrated circuits and the functional block approach. Introduces concepts of computers, the internal operation and control language. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 285 Fundamentals of Microcomputer Repair (4 CR) Provides the student with an exposure to the various techniques and procedures used to troubleshoot a microcomputer. May include an overview of a particular microprocessor system, use of isolation flow charts, test point charts, prints, diagnostic routines, component testing and fault isolation labs. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 286 Principles and Applications of Robotics (3 CR)

Prerequisites: ELE 134 or ETR 113 and corequisite IND 250. Provides an overview of terminology, principles, practices, and applications of robotics. Studies development, programming; hydraulic, pneumatic, electronic controls; sensors, and system troubleshooting. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

FIN - FINANCIAL SERVICES

FIN 107 Personal Finance (3 CR) 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.

FIN 215 Financial Management (3 CR) Prerequisites: ACC 212, BUS 125. Pre/Corequisite: BUS 225. Introduces basic financial management topics including statement analysis, working capital, capital budgeting, and long-term financing. Focuses on Net Present Value and Internal Rate of Return techniques, lease vs. buy analysis, and Cost of Capital computations. Uses problems and cases to enhance skills in financial planning and decision making. Lecture 3 hours per week.

FRE – FRENCH

FRE 101-102 Beginning French I-II (4 CR, 4 CR) Prerequisite for FRE 102: FRE 101. Introduces understanding, speaking, reading, and writing skills and emphasizes basic French sentence structure. Lecture 4 hours per week.

FRE 201-202 Intermediate French I-II (3 CR, 3 CR) Prerequisites: For FRE 201, prerequisite is FRE 102; for FRE 202, prerequisite is FRE 201. Continues to develop understanding, speaking, reading, and writing skills. French is spoken in the classroom. Lecture 3 hours per week.

GEO – GEOGRAPHY

GEO 200 Introduction to Physical Geography (3 CR) 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: Introduction to Cultural Geography (3 CR) Focuses on the relationship between culture and geography. Presents a survey of modern demographics, landscape modification, material and non-material culture, language, race and ethnicity, religion, politics, and economic activities. Introduces the student to types and uses of maps. Lecture 3 hours per week.

GEO 220 World Regional Geography (3 CR) Studies physical and cultural characteristics of selected geographical regions of the world. Focuses upon significant problems within each of the regions, and examines the geographical background of those problems. Introduces the student to types and uses of maps. Lecture 3 hours per week.

GER - GERMAN

GER 101-102 Beginning German I-II (4 CR, 4 CR) Introduces understanding, speaking, reading, and writing skills and emphasizes basic German sentence structures. Lecture 4 hours per week.

GER 201-202 Intermediate German I-II (4 CR, 4 CR) Prerequisite: GER 102 or equivalent. For GER 202 Prerequisite: GER 201. Continues to develop understanding, speaking, reading, and writing skills. German is used in the classroom. Lecture 4 hours per week.

GIS – GEOGRAPHIC INFORMATION SYSTEMS

GIS 101 Introduction to Geospatial Technology I (3 CR)
Prerequisite: Basic computer knowledge including file management, mouse usage and keyboarding skills; MTE 1, 2 and 3 or divisional approval. 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. Lecture 3 hours per week.

GIS 102 Introduction to Geospatial Technology II (3 CR)
Prerequisite: GIS 101. 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. Lecture 3 hours per week.

GIS 200 Geographical Information Systems I (3 CR) Prerequisite: EGR 216 or ITE 115 or equivalent and MTE 1, 2 and 3, or divisional approval. 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. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

GIS 201 Geographic Information Systems II (3 CR) Prerequisite: GIS 200. Provides a continuation of GIS 200, with emphasis on advanced topics in problem-solving, decision-making, modeling, programming, and data management. Covers map projections and data formats, and methods for solving the problems they create. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

GIS 205 GIS 3-Dimensional Analysis (3 CR) Prerequisite: GIS 201 or divisional approval. Introduces GIS 3D (three-dimensional) concepts and practices with a concentration on displaying, creating and analyzing spatial GIS data using 3D. Covers 3D shape files, 3D data formats such as Tin's, DEM's, grids and controlling the perspective and scale of 3D data through, rotating, panning and zooming. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

GIS 210 Understanding Geographic Data (3 CR) Prerequisite: GIS 201 or divisional approval. Provides the student an introduction to geographic data and the principles behind their construction. Introduces the concepts for measuring locations and characteristics of entities in the real world. Exposes the student to the limitations and common characteristics of geographic data. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

GOL - GEOLOGY

GOL 105 Physical Geology (4 CR) Prerequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. 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.

GOL 106 Historical Geology (4 CR) Prerequisites: A placement recommendation for ENG 111 or successful completion of all developmental English requirements. GOL 105 recommended but not required. Traces the evolution of the earth and life through time. Presents scientific theories of the origin of the earth and life and interprets rock and fossil record. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

GOL 135 Field Studies in Geology (1–2 CR) Investigates geologic phenomena. Includes activities such as observation of regional geology and landforms, collection of samples, and measurement and interpretation of geologic structures. Field studies 3-6 hours per week.

HIM – HEALTH INFORMATION MANAGEMENT

HIM 111 - Medical Terminology I (3 CR) Introduces the student to the language used in the health record. Includes a system-by-system review of anatomical disease, and operative terms, abbreviations, radiography procedures, laboratory tests, and pharmacology terms. Lecture 3 hours per week.

HIM 130 Healthcare Information Systems (3 CR) Teaches basic concepts of microcomputer software (to include operating systems, word processing, spreadsheets, and database applications). Focuses on microcomputer applications and information systems in the Healthcare environment. Provides a working introduction to electronic health information systems for allied health, teaching students how the adoption of electronic health records affects them as future healthcare professionals. Lecture 3 hours per week.

HIM 149 Introduction to Medical Practice Management (2 CR) Introduces principles of administrative practice management. Examines patient scheduling, records management, financial systems and other office systems/ procedures. Focuses on the development of organizational and decision-making skills utilized by the practice manager. Lecture 2 hours per week.

HIM 150 - Health Records Management (3 CR) Presents documentation format and content of the medical record relevant to the coding function. Introduces application of standard techniques for filing, maintenance, and acquisition of health information. Examines the processes of collecting, computing, analyzing, interpreting, and presenting data related to health care services. Includes legal and regulatory guidelines for the control and use of health information data. Lecture 3 hours per week.

HIM 190 Coordinated Internship I (2 CR) Prerequisite: All curriculum requirements must be completed. Corequisite: HIM 254. Supervises on-the-job training in selected business, industrial or service firms coordinated by the college. Lecture 2 hours per week.

HIM 226 Legal Aspects of Health Record Documentation (2 CR) Presents the legal requirements associated with health record documentation. Emphasizes the policies and procedures concerning the protection of the confidentiality of a patient's health records. Lecture 2 hours per week.

HIM 230 - Information Systems and Technology in Health Care (3 CR) Explores computer technology and system application in health care. Introduces the information systems life cycle. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HIM 233 - Electronic Health Records Management (3 CR)
Prerequisites: HIM 130 and HIM 230. Studies new trends in

management and processing of health information with emphasis on the electronic health record (EHR). Covers the definition, benefits, standards, functionality, confidentiality and security, and impact of the EHR in the healthcare environment. Explores implementation of the EHR including infrastructure required, project management techniques, information technology systems, workflow processes and redesign in various health care settings. Discusses legal issues created by implementation of the EHR. Lecture 3 hours per week.

HIM 249 Supervision and Management Practices (3 CR)

Prerequisite: CST 100, MTE 1 and 2. Introduces supervision and management principles with emphasis on the application of these principles in the health information setting. Lecture 3 hours per week.

HIM 253 Health Records Coding (4 CR) Prerequisite: HLT 143.

Pre/Corequisite: HLT 144. Examines the development of coding classification systems. Introduces ICD-9-CM coding classification system, its format and conventions. Stresses basic coding steps and guidelines according to body systems. Provides actual coding exercises in relation to each system covered. Lecture 4 hours per week.

HIM 254 Advanced Coding and Reimbursement (4 CR)

Prerequisite: HIM 253, HLT 143, and HLT 144. Stresses advanced coding skills through practical exercises using actual medical records. Introduces CPT-4 coding system and guidelines for out-patient/ambulatory surgery coding. Introduces prospective payment system and its integration with ICD-9-CM coding. Lecture 4 hours per week.

HIM 290 Coordinated Internship II (1–5 CR) Prerequisite: All curriculum requirements must be completed. Departmental approval required. Supervises on-the-job training in selected business, industrial or service firms coordinated by the college. Variable hours.

HIS – HISTORY

HIS 101-102 History of Western Civilization I-II (3 CR, 3 CR)

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. Courses may be taken out of sequence. Lecture 3 hours per week.

HIS 111-112 History of World Civilization I-II (3 CR, 3 CR) Surveys Asian, African, Latin American, and European civilizations from the ancient period to the present. HIS 111 covers ancient times to 1650. HIS 112 covers 1650 to present. HIS 111 and 112 may be taken out of sequence. Lecture 3 hours per week.

HIS 121-122 United States History I-II (3 CR, 3 CR) Surveys United States history from its beginning to the present. HIS 121 covers America from the 1500s to 1865 and HIS 122 continues the course to present times. Courses may be taken out of sequence. Lecture 3 hours per week.

HIS 141-142 African-American History I-II (3 CR) Surveys the history of black Americans from their African origins to the present. Lecture 3 hours per week.

HIS 205 Local History (3 CR) Studies the history of the local community and/or region. Lecture 3 hours per week.

HIS 241-242 History of Russia I-II (3 CR, 3CR) Surveys history of Russia from earliest times to the present. Includes political, economic, multi-national, social, and cultural aspects of Russian and Soviet history. Lecture 3 hours per week.

HIS 251 History of Middle East Civilization I (3 CR) Surveys intellectual, cultural, social, economic and religious patterns in the civilizations of the Middle East. Covers Semitic, Indo-European, and Tarkic-speaking peoples from pre-Islamic to the present. Lecture 3 hours per week.

HIS 253-254 - History of Asian Civilizations I-II (3 CR, 3CR) Surveys the civilizations of Asia from their origins to the present. Lecture 3 hours per week.

HIS 267 The Second World War (3 CR) Examines causes and consequences of the Second World War. Includes the rise of totalitarianism, American neutrality, military developments, the home fronts, diplomacy, and the decision to use the atomic bomb. Lecture 3 hours per week.

HIS 269 Civil War and Reconstruction (3 CR) 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 279 Age of the American Revolution (3 CR) Examines the factors that led to the separation of the American Britain colonies from Great Britain. Covers the Revolutionary War, the problems faced by the revolutionary government, and postwar events that led to the adoption the United States Constitution. Lecture 3 hours per week.

HLT - HEALTH

(Only the health courses below marked with an asterisk (*) are approved to meet the HLT/PED requirement.)

HLT 100* First Aid and Cardiopulmonary Resuscitation (3 CR)

Focuses on the principles and techniques of safety, first aid, and cardiopulmonary resuscitation. Lecture 3 hours per week.

HLT 105* Cardiopulmonary Resuscitation (1 CR) Equivalent to EMS 100. Provides training in coordinated mouth-to-mouth artificial ventilation and chest compression, choking, life-threatening emergencies, and sudden illness. Lecture 1 hour per week.

HLT 106* First Aid and Safety (2 CR) Focuses on the principles and techniques of safety and first aid. Lecture 2 hours per week.

HLT 110* Concepts of Personal and Community Health (2–3 CR)

Studies the concepts related to the maintenance of health, safety, and the prevention of illness at the personal and community level. Lecture 2–3 hours per week.

HLT 116* Introduction to Personal Wellness Concepts (2 CR)

Introduces students to the dimensions of wellness including the physical, emotional, environmental, spiritual, occupational, and social components. Lecture 2 hours per week.

HLT 125 Anatomy and Physiology for Exercise Science (3 CR)

Presents basic principles of human anatomy and physiology including the body structure, systems and functions. The course provides a foundation to build and apply concepts in the study of Exercise Science, Group Fitness, Personal Training and related fitness studies. Lecture 3 hours per week.

HLT 135* Child Health and Nutrition (3 CR) Focuses on the physical needs of the preschool child and the methods by which these are met. Emphasizes health routines, hygiene, nutrition, feeding and clothing habits, childhood diseases, and safety as they relate to health, growth, and development. Lecture 3 hours per week.

HLT 138 Principles of Nutrition (2 CR) Studies nutrient components of food, including carbohydrates, fats, proteins, vitamins, minerals and water. Provides a behavioral approach to nutrient guidelines for the development and maintenance of optimum wellness. Lecture 2 hours per week.

HLT 141 Introduction to Medical Terminology (1 CR) Prerequisite: Acceptance into the AAS Nursing program. Focuses on medical terminology for students preparing for careers in the health professions. Lecture 1 hour per week.

HLT 143 Medical Terminology I (3 CR) Prerequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. 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 144 Medical Terminology II (3 CR) Prerequisites: Successful completion of HLT 143. 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 145 Ethics for Health Care Personnel (2 CR) Focuses on ethical concepts of health care. Emphasizes confidentiality, maintaining patient records, personal appearance, professionalism with patients/clients, associates, and an awareness of health care facilities. Lecture 2 hours per week.

HLT 206 Exercise Science (3 CR) Prerequisite: MTE 1 and 2, HLT 125. 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 CR) Prerequisite: HLT 100; MTE 1 and 2. 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. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HLT 217 Exercise and Nutrition for Behavioral Change (3 CR) Studies the principles of behavioral change. Applies the stages of change as it relates to motivation in the fitness and nutrition industry. Lecture 3 hours per week.

HLT 230* Principles of Nutrition and Human Development (3 CR) 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 CR) 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.

HLT 290 Coordinated Internship (3 CR) Prerequisites: HLT 125, HLT 100, HLT 206, HIM 249, HLT 217, MTE 1 and 2. Supervises on-the-job training in selected business, industrial or service firms coordinated by the college. Credit/ practice ratio not to exceed 1:5 hours. May be repeated for credit.

HRI – HOTEL-RESTAURANT-INST MGMT (FOOD SERVICE MANAGEMENT)

HRI 106 Principles of Culinary Arts I (3 CR) Introduces the fundamental principles of food preparation and basic culinary procedures. Stresses the use of proper culinary procedures combined with food service, proper sanitation, standards of quality for food items that are made, and proper use and care of kitchen equipment. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRI 107 Principles of Culinary Arts II (3 CR) Prerequisites: HRI 106, HRI 158 and HRI 219. Introduces the fundamental principles of food preparation and basic culinary procedures. Stresses the use of proper culinary procedures combined with food science, proper sanitation, standards of quality for food items that are made, and proper use and care of kitchen equipment. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRI 119 Applied Nutrition for Food Service (3 CR) Studies food composition, nutrition science, and application of nutrition principles by the food service professional. Provides the student with a basic understanding of human nutrition and application of nutrition in the service of commercially prepared meals. Lecture 3 hours per week.

HRI 128 Principles of Baking (3 CR) Prerequisite or Corequisite: HRI 158 and SDV 101 for Baking and Pastry majors. Instructs the student in the preparation of breads, pastries, baked desserts, candies, frozen confections, and sugar work. Applies scientific principles and techniques of baking. Promotes the knowledge/skills required to prepare baked items, pastries and confections. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 145 Garde Manger (3 CR) Prerequisite: HRI 106 and HRI 158. Studies garde manger, the art of decorative cold food preparation and presentation. Provides a detailed practical study of cold food preparation and artistic combination and display of cold foods. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 154 Principles of Hospitality Management (3 CR) Presents basic understanding of the hospitality industry by tracing the industry's growth and development, reviewing the organization and management of lodging, food, and beverage operations, and focusing on industry opportunities and future trends. Lecture 3 hours per week.

HRI 158 Sanitation and Safety (3 CR) Covers the moral and legal responsibilities of management to insure a sanitary and safe environment in a food service operation. Emphasizes the causes and prevention of foodborne illnesses in conformity with federal, state and local guidelines. Focuses on OSHA standards in assuring safe working conditions. Lecture 3 hour per week.

HRI 206 International Cuisine (3 CR) Prerequisite: HRI 106, HRI 158, HRI 145 and HRI 219. Introduces the concepts of cultural differences and similarities and the preparation of the food specialties of the major geographical areas of the world. Focuses on emerging cuisines as they become popular. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 207 American Regional Cuisine (3 CR) Prerequisite: HRI 106, HRI 158, HRI 145 and HRI 219. Studies the distinct regional cooking styles of America and its neighbors. Emphasizes the indigenous ingredients as well as the cultural aspect of each region's cooking style. Includes the preparation of the various regional foods. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 215 Food Purchasing (3 CR) Presents the method and procedures for purchasing food for hotels, restaurants and institutions. Deals with markets, federal and trade grades, governmental regulations, packaging, comparative versions price buying, yields and quality control. Lecture 3 hours per week.

HRI 219 Stock, Soup, and Sauce Preparation (3 CR) Prerequisite: HRI 106 and HRI 158. Instructs the student in the preparation of stocks, soups, and sauces. Promotes the knowledge/skills to prepare stocks, soups, and sauces, and to select appropriate uses as meal components. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 220 Meat, Seafood, and Poultry Preparation (3 CR) Prerequisite: HRI 106 and HRI 158. Provides the study and preparation of meat, poultry, shellfish, fish, and game. Promotes the knowledge/skills required to select appropriate use of these foods as meal components. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 251 Food and Beverage Cost Control I (3 CR) Prerequisite: MTH 120 or divisional approval. Presents methods of pre-cost and pre-control as applied to the menu, purchasing, receiving, storing, issuing, production, sales and service which result in achievement of an operation's profit potential. Emphasizes both manual and computerized approaches. Lecture 3 hour per week.

HRI 280 Principles of Advanced Baking and Pastry (3 CR) Prerequisite: HRI 158 and HRI 128 or equivalent. Reviews foundation principles of classical and modern baking/pastry methods. Lecture 2 hours. Laboratory 3 Hours. Total 5 hours per week.

HRI 281 Artisan Breads (3 CR) Prerequisite: HRI 280. Provides an integrated study of both classical and modern baking methods. Focuses on craft baking using simple ingredients to create superior products. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 282 European Tortes and Cakes (3 CR) Prerequisite: HRI 280. Provides an integrated study of European tortes and cakes. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 283 Custards and Cremes (3 CR) Prerequisite: HRI 280. Provides an integrated study of classical and contemporary custards and cremes as menu items and recipe ingredients. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 284 Specialty, Spa and Plated Desserts (3 CR) Prerequisite: HRI 280. Provides integrated study of specialty, spa and plated desserts, which possess enhanced value through artistic presentation. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 285 Chocolate and Sugar Arts (3 CR) Prerequisite: HRI 280. Focuses on an integrated study of chocolate and sugar as used by the pastry artist to create candies, confections and showpieces. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 286 Wedding and Specialty Cakes (3 CR) Prerequisites: HRI 280, HRI 282 and HRI 285. Provides an integrated study of classical and contemporary wedding and specialty cakes. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

HRI 290 Coordinated Internship in Hospitality Management (2 CR) Corequisite: SDV 106. Supervises the on-the-job training in selected health agencies, business, industrial, or service firms coordinated by the college. Credit/practice ratio not to exceed 1:5 hours. May be repeated for credit. Variable hours.

HRT - HORTICULTURE

HRT 110 Principles of Horticulture (3 CR) Introduces concepts of plant growth and development. Covers horticultural practices, crops and environmental factors affecting plant growth. Lecture 3 hours per week.

HRT 115 Plant Propagation (3 CR) Teaches principles and practices of plant propagation methods. Examines commercial and home practices. Provides experience in techniques using seed-spores, cuttings, grafting, budding, layering, and division. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 117 Tools and Equipment (2 CR) Introduces tools and equipment used in commercial horticulture. Emphasizes power-operated equipment including spreaders, sprayers, saws and tractors. Stresses safety, maintenance, minor repair and appropriate tool selection. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

HRT 121 Greenhouse Crop Production I (3 CR) Covers commercial practices related to production of floriculture crops. Considers production requirements, environmental control and management, and cultural techniques. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 198 Seminar and Project (1 CR) 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.

HRT 201-202 Landscape Plants I-II (3 CR, 3 CR) Studies landscape use of plants. Considers ornamental value, growth habit, identification, and limitations. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 205 Soils (3 CR) Teaches theoretical and practical aspects of soils and other growing media. Examines media components, chemical and physical properties, and soil organisms. Discusses management and conservation. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 207 Plant Pest Management (3 CR) Teaches principles of plant pest management. Covers morphology and life cycles of insects and other small animal pests and plant pathogens. Lab stresses diagnosis, chemical and non-chemical control of specific pests, and pesticide safety. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 227 Professional Landscape Management (3 CR) Focuses on basic practices and techniques involving landscape management. Includes development of a year-round management calendar and preparation of bid and contract proposals. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 231 Planting Design I (3 CR) Prerequisite: HRT 201. Applies landscape theory and principles of drawing to the planning of residential and small-scale commercial landscape designs. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 232 Planting Design II (3 CR) Prerequisite: HRT 231. Applies landscape theory and principles of drawing to the planning of large-scale landscape designs. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 246 Herbaceous Plants (3 CR) Studies identification, culture and uses of herbaceous plants in landscaping. Includes perennials, biennials, common bulbs and annuals. Teaches scientific and common names of plants. Lecture 2 hour. Laboratory 2 hours. Total 4 hours per week.

HRT 260 Introduction to Floral Design (3 CR) Teaches skills required for the composition of basic table arrangements. Includes the history of design styles, identification of flowers and green, identification and use of equipment, and conditioning and handling of flowers. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 269 Professional Turf Care (3 CR) Covers turfgrass identification, selection, culture, propagation, and pest control. Surveys commercial turf care operations and use of common equipment. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 285 Management of a Horticultural Business (3 CR) Studies the business and selling practices, which relate to wholesale and retail horticultural businesses including garden centers, greenhouses, nurseries, and flower shops. Examines planning and layout, suppliers, merchandising, maintenance, and display of horticultural items. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 296 Training in Arboretum Internship (2 CR) Specializes in career orientation and training program without pay in selected businesses and industry, supervised and coordinated by the college. Internship 4 hours per week.

HUM – HUMANITIES

HUM 201 Survey of Western Culture I (3 CR) 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 CR) 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 215 Native American Culture (3 CR) Surveys the cultural history of Native (Indian) peoples in the Americas from the pre-Columbian era until the present. Studies history, religion, literature, arts, life-ways and world views which comprise the diverse traditions of Native peoples. Lecture 3 hours per week.

HMS - HUMAN SERVICES

HMS 226 Helping Across Cultures (3 CR) 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 236 Gerontology (3 CR) 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. Lecture 3 hours per week.

HMS 251 Substance Abuse I (3 CR) 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 280 Understanding Serious Mental Illness (3 CR) Provides an overview of current information about serious and persistent mental illnesses and their treatment. Includes a particular focus on relapse prevention and recovery. Lecture 3 hours per week.

IND – INDUSTRIAL ENGINEERING TECHNOLOGY

IND 75 Industrial Measurements and Conversions (1 CR) Covers a review of basic arithmetic principles with an intensive application of measurement and calibration devices, such as dial calipers, rulers, and various micrometers. Develops a proficiency for entrance into skilled trades or industrial practices. Lecture 1 hour per week.

IND 108 Technical Computer Applications (3 CR) Develops data entry proficiency for technical application and word processing as applied to technology. Presents an introduction to computer operating systems as related to technical applications. Includes demonstrations of selected technical topics such as CAD, CNC, Graphic illustration I/Os involving PLCs, telecommunications (modems), and process control. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

IND 113 Materials and Processes in Manufacturing I (3 CR) Studies materials and processes for the manufacture of products. Investigates the nature of various materials. Examines the manufacturing processes of industry and their effects on materials. Lecture 3 hours per week.

IND 116 Applied Technology (3 CR) 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 230 Applied Quality Control (3 CR) Studies principles of inspection and quality assurance with emphasis on statistical process control. May include the setting up, maintaining, and interpreting of control charts, and review of basic metrology. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

IND 243 Principles and Applications of Mechatronics (3 CR) Prerequisite: MEC 140. Introduces terminology and principles related to Mechatronic system design and application. Integrates concepts of electrical/electronic, mechanical and computer technologies in the development, setup, operation and trouble shooting of automated products and systems. Covers breakdown of various automated manufacturing operations with emphasis on system planning, development and trouble shooting processes. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

IND 250 Introduction to Basic Computer Integrated

Manufacturing (3 CR) Presents basic principles used in the design and implementation in a computer integrated manufacturing system. Emphasizes team concept and all aspects of a computer integrated manufacturing system to include the following: Robotics, Conveyor Control, Machining Center Integration Quality Control, Statistical Quality Control, and Computer Integrated Manufacturing (CIM) software. Lecture 1 hour. Laboratory 4 hours. Total 5 hours per week.

IND 251 Automated Manufacturing Systems I (4 CR) Prerequisite: divisional approval. Presents basic principles used in the design and implementation in manufacturing work cells. Includes selection of the robot system, worksite, application cell sensors, development of cycle times, and economic analysis. Lecture 2 hours. Laboratory 4 hours. Total 6 hours per week.

ITD – INFORMATION TECHNOLOGY DATABASE AND WEB DESIGN

ITD 110 Web Page Design I (3 CR) 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. Lecture 3 hours per week.

ITD 112 Designing Web Page Graphics (3 CR) Prerequisite or Corequisite: ITD 110 or divisional approval. Explores the creation of digital graphics for web design. Includes basic design elements such as color and layout will be explored utilizing a computer graphics program(s). Lecture 3 hours per week.

ITD 115 Web Page Design and Site Management (3 CR) Explores fundamentals of creating web pages and site management with web editing software. Students will learn techniques of web page design as well as managing the resources required to author and maintain a web site. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ITD 120 Design Concepts for Mobile Applications (3 CR) Prerequisite: ITP 140. Provides skills for designing both Web-based and stand-alone applications for wireless devices. Details discussions of the needs for applications including mobile phones and a range of rich hand-held devices such as PDA's. Emphasizes the importance of usability, accessibility, optimization and performance to create fast-loading business enterprise applications and games. Lecture 3 hours per week.

ITD 130 Database Fundamentals (3 CR) Introduces the student to Relational Database and Relational Database theory. Includes planning, defining and using a database; table design, linking and normalization; types of database, database description and definition. Lecture 3 hours per week.

ITD 210 Web Page Design II (3 CR) Prerequisite: ITD 110 or divisional approval. Incorporates advanced techniques in web site planning, design, usability, accessibility, advanced site management, and maintenance utilizing web editor software(s). Lecture 3 hours per week.

ITD 220 E-Commerce Administration (3 CR) Prerequisite: Divisional approval. Emphasizes techniques to plan and to design a platform-independent commerce Web site. Focuses on web business strategies, and the hardware and software tools necessary for Internet commerce, including comparison and selection of commerce architecture, installation and configuration, security

considerations, and planning of a complete business-to-consumer and business-to-business site. Lecture 3 hours per week.

ITD 250 Database Architecture and Administration (3 CR) Prerequisite: ITD 130 or divisional approval. Involves in-depth instruction about the underlying architecture of databases and the handling of database administration. Lecture 3 hours per week.

ITE – INFORMATION TECHNOLOGY ESSENTIALS

ITE 102 Computer and Information Systems (1 CR) Introduces terminology, concepts, and methods of using computers in information systems. This course teaches computer literacy; not intended for Information Technology majors. Lecture 1 hour per week.

ITE 115 Introduction to Computer Applications and Concepts (3 CR) Covers computer concepts and internet skills, and uses a software suite which includes word processing, spreadsheet, database, and presentation software to demonstrate skills. Recommended prerequisite keyboarding skills. Lecture 3 hours per week.

ITE 116 Survey of Computer Software Applications (1 CR) Prerequisite: Basic keyboarding skills required. Review current business software applications for microcomputers emphasizing comparison of a variety of software packages. Provides experience with multiple operating system commands, database, spreadsheet, word processing and presentation software programs. College students are expected to be competent in the use of computers that will prepare one for enrollment in ITE 115. Lecture 1 hour per week.

ITE 119 Information Literacy (3 CR) (Spring Only) 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 CR) 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. New features include faster, more responsive performance, simpler to use Jump Lists, quickly locate the files you have been working with, improved taskbar and full screen previews, desktop enhancements with Snaps, and much more! Lecture 1 hour per week.

ITE 140 Spreadsheet Software (3 CR) 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. Covers MOS Excel objectives. Lecture 3 hours per week.

ITE 141 Microcomputer Software Spreadsheets (1CR) Prerequisite: Preferred knowledge or experience with MS Windows and keyboarding. Provides first-time users with sufficient information to make practical use of spreadsheet software using the basic of building spreadsheets. Course to include the basics of spreadsheets using Microsoft Excel 2013's latest software. This course shows you how to use the Ribbon and highlights the other changes in Excel that will help you make better worksheets, faster. Learn to use the new File Tab, which contains basic file management commands such

as New, Open, Save, and Close and program options. Topics include basic formulas, formatting a worksheet, creating and working with charts, managing workbooks, working with functions and printing results. Lecture 1 hour per week.

ITN – INFORMATION TECHNOLOGY NETWORKING

ITN 107 Personal Computer Hardware and Troubleshooting (3 CR) ETR 113 will substitute for ITN 107. Includes specially designed instruction to give a student a basic knowledge of hardware and software configurations. Includes the installation of various peripheral devices as well as basic system hardware components. Lecture 3 hours per week.

ITN 109 Internet and Network Foundation (3 CR) Provides a basic comprehension of Internet and network technologies including IT job roles, connection methods, TCP/ IP functionality and DNS. Explores web server technologies with security and project management concepts. Introduces network creation, physical and logical topologies including media properties, server types, IP addressing and network security. Lecture 3 hours per week.

ITN 110 Client Operating System (Windows 8) (3 CR) Prerequisite or corequisite: ITN 109. Introduces an overview of instruction in installation, configuration, administration, and troubleshooting of Client Operating System (Windows 8) in a networked data communications environment. Lecture 3 hours per week.

ITN 111 Server Administration (Windows Server 2012) (4 CR) Prerequisite: ITN 109. 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 (Windows Server 2012) in an Active Directory domain environment. Lecture 4 hours per week.

ITN 112 Network Infrastructure (Windows Server 2012) (3 CR) Prerequisite: ITN 111. Provides extensive instruction for the technical knowledge required for installation, configuration, administration, monitoring, and troubleshooting of Network Infrastructure services (Windows Server 2012) such as NDS, DHCP, WINS, RRAS, NAT, and Certificate Authority to support the network infrastructure. Lecture 3 hours per week.

ITN 113 Active Directory (Windows Server 2012) (4 CR) Prerequisite: ITN 111. Emphasizes instruction in installation, configuration, and administration, monitoring, and troubleshooting of Active Directory (Windows Server 2012) components, DNS, Group Policy objects, RIS, and security. Lecture 4 hours per week.

ITN 260 Network Security Basics (3 CR) 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. Lecture 3 hours per week.

ITP – INFORMATION TECHNOLOGY PROGRAMMING

ITP 100 Software Design (3 CR) 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. Lecture 3 hours per week.

ITP 120 Java Programming I (4 CR) Prerequisite: ITP 100 or divisional approval. 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. Lecture 4 hours per week.

ITP 136 C# Programming I (4 CR) Prerequisite: ITP 100 or divisional approval. Presents instruction in fundamentals of object-oriented programming and design using C#. Emphasizes program construction, algorithm development, coding, debugging, and documentation of applications within the .NET framework. Lecture 4 hours per week.

ITP 137 Programming iOS Devices (4 CR) Examines object-oriented Objective C design and programming concepts for Mac OS X, iPhone and iPad. Introduces the tools and APIs for the latest iOS SDK, and how they fit together to build full-featured iOS and Mac OS X applications. Lecture 4 hours per week.

ITP 140 Client Side Scripting (3 CR) Prerequisite: ITD 110 and ITP 100 or divisional approval. Provides instruction in fundamentals of Internet application design, development, and deployment using client side scripting language(s). Lecture 3 hours per week.

ITP 160 Introduction to Game Design & Development (3 CR) 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. Lecture 3 hours per week.

ITP 170 Project Management (3 CR) Prerequisite: Divisional approval. Introduces the concepts of project management as defined by the Project Management Institute, the accreditation body for project management. Lecture 3 hours per week.

ITP 220 Java Programming II (4 CR) Prerequisite: ITP 120. Prerequisite or Corequisite: ITD 130. Imparts instruction in application of advanced object-oriented techniques to application development using Java. Emphasizes database connectivity, inner classes, collection classes, networking, and threads. Lecture 4 hours per week.

ITP 225 Web Scripting Languages (3 CR) Prerequisite: ITD 110, ITP 100 and ITP 140 or divisional approval. Introduces students to the principles, systems, and tools used to implement Web applications. Provides students with a comprehensive introduction to the programming tools and skills required to build and maintain interactive Web sites. Students will develop Web applications utilizing client-side and server-side scripting languages along with auxiliary tools needed for complete applications. Lecture 3 hours per week.

ITP 226 Mobile Java Android Development (4 CR) Prerequisite: experience with object-oriented programming or instructor approval. Provides the necessary design and programming skills required for developing applications on mobile devices (smartphones, tablets, etc.). Utilize the Java-based Android

Development Kit to create Android applications, from concept to business model to final product. Lecture 4 hours per week.

ITP 236 C# Programming II (4 CR) Prerequisite: ITP 136. Prerequisite or Corequisite: ITD 130. Focuses instruction in advanced object-oriented techniques using C# for application development. Emphasizes database connectivity and networking using the .NET framework. Lecture 4 hours per week.

ITP 240 Server Side Programming (4 CR) Centers around instruction in fundamentals of Internet application design, development, and deployment. Includes implementation of server component models, security, and database connectivity using server-side programming. Lecture 4 hours per week.

ITP 244 ASP.NET – Server-Side Programming (3 CR) Prerequisite: ITD 130 and ITP 136. Entails instruction in creation of ASP.NET Web applications to deliver dynamic content to a Web site utilizing server controls, web forms, and web services to accomplish complex data access tasks. Lecture 3 hours per week.

ITP 246 Java Server-Side Programming (4 CR) Prerequisite: ITP 220 or divisional approval. Provides instruction in application and integration of web-based clients and server-side Java to three-tier business applications. Includes use of tools UML, XML, Java servlets, JSPs and JDBC database access. Lecture 4 hours per week.

ITP 247 Native Mobile Programming (specify platform) (4 CR) Covers programming skills for creating native applications in (specify platform) for wireless devices. Discusses the unique constraints for programming mobile apps and introduces the student to the key business and technology skills required to work in this field. Lecture 4 hours per week.

LAT - LATIN

LAT 101-102 Elementary Latin I-II (3 CR, 3 CR) Teaches Latin grammar and composition. Introduces the translation of Latin literature, with special selections from Caesar and other writers. Lecture 3 hours per week.

LAT 201-202 Intermediate Latin I-II (3 CR, 3 CR) Prerequisites: two years high school Latin or one year college Latin. Introduces the reading of classical Latin with a review of Latin grammar, forms, and syntax. Lecture 3 hours per week.

LGL – LEGAL ADMINISTRATION

LGL 110 Introduction to Law and the Legal Assistant (3 CR) Introduces various areas of law in which a legal assistant may be employed. Includes study of 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 CR) Studies law of real property and gives in-depth survey of 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. Lecture 3 hours per week.

LGL 117 Family Law (3 CR) Studies elements of a valid marriage, grounds for divorce and annulment, separation, defenses, custody, support, adoptions, and applicable tax consequences. Includes property settlement, pre- and ante-nuptial agreements, pleadings,

and rules of procedure. May include specific federal and Virginia consumer laws. Lecture 3 hours per week.

LGL 125 Legal Research (3 CR) Corequisite: LGL 126. Provides an understanding of various components of the law library, and emphasizes research skills through the use of digests, encyclopedias, reporter systems, codes, Shepard's Citations, ALR, and other research tools. May include overview of computer applications and writing projects. Lecture 3 hours per week.

LGL 126 Legal Writing (3 CR) Prerequisite: ENG 111 or divisional approval. Corequisite: LGL 125. Studies proper preparation of various legal documents, including legal memoranda, letters, and pleadings. Involves practical applications. May include case and appellate briefs. Lecture 3 hours per week.

LGL 130 Law Office Administration and Management (3 CR) Introduces management principles and systems applicable to law firms, including record keeping, disbursements, escrow accounts, billing, and purchasing. May include accounting methods and software packages applicable to law firms. Lecture 3 hours per week.

LGL 210 Virginia and Federal Procedure (3 CR) Prerequisite: Successful completion of all 100 level LGL courses or divisional approval. Examines the rules of procedure in the Virginia and federal court systems, including the Federal Rules of Civil Procedure and the Rules of Practice and Procedure in the District Courts, Circuit Courts, Virginia Court of Appeals, and the Supreme Court of Virginia. Lecture 3 hours per week.

LGL 215 Torts (3 CR) Prerequisite: Successful completion of all 100 level LGL courses or divisional approval. Studies fundamental principles of the law of torts. May include preparation and use of pleadings and other documents involved in the trial of a civil action. Emphasizes personal injury, products liability, and malpractice cases. Lecture 3 hours per week.

LGL 216 Trial Preparation and Discovery Practice (3 CR) Prerequisite: Successful completion of all 100 level LGL courses or divisional approval. Examines the trial process, including the preparation of a trial notebook, pretrial motions, and orders. May include the preparation of interrogatories, depositions, and other discovery tools used in assembling evidence in preparation for trial or an administrative hearing. Lecture 3 hours per week.

LGL 218 Criminal Law (3 CR) Prerequisite: Successful completion of all 100 level LGL courses or divisional approval. 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 procedures. Lecture 3 hours per week.

LGL 225 Estate Planning and Probate (3 CR) Prerequisite: Successful completion of all 100 level LGL courses or divisional approval. Introduces various devices used to plan an estate, including wills, trusts, joint ownership and insurance. Considers various plans in light of family situations and estate objectives. Focuses on practices involving administration of an estate, including taxes and preparation of forms. Lecture 3 hours per week.

LGL 230 Legal Transactions (3 CR) Prerequisite: Successful completion of all 100 level LGL courses or divisional approval. Presents an in-depth study of general contract law, including formation, breach, enforcement, and remedies. May include an overview of the Uniform Commercial Code sales, commercial paper, and collections. Lecture 3 hours per week.

LGL 235 Legal Aspects of Business Organizations (3 CR)

Prerequisite: Successful completion of all 100 level LGL courses or divisional approval. Studies the fundamental principles of agency law and the formation of business organizations. Includes sole proprietorship, partnerships, corporations, limited liability companies, and other business entities. Reviews preparation of the documents necessary for the organization and operation of businesses. Lecture 3 hours per week.

LGL 238 Bankruptcy (3 CR) Prerequisite: Successful completion of all 100 level LGL courses or divisional approval. Provides a practical understanding of non-bankruptcy alternatives and the laws of bankruptcy including Chapters 7, 11, 12 and 13 of the Bankruptcy Code. Emphasis will be placed on preparing petitions, schedules, statements and other forms. Lecture 3 hours per week.

MAC - MACHINE TECHNOLOGY

MAC 131 Machine Lab I (3CR) Teaches fundamental machine shop operations, bench work, layout, measuring tools, and safety. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

MAC 161 Machine Shop Practices I (3CR) 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 2 hours. Total 4 hours per week.

MDL - MEDICAL LABORATORY

MDL 105 Phlebotomy (3 CR) Introduces basic medical terminology, anatomy, physiology, components of health care delivery and clinical laboratory structure. Teaches techniques of specimen collection, specimen handling, and patient interactions. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

MDL 106 Clinical Phlebotomy (4 CR) Focuses on obtaining blood specimens, processing specimens, managing assignments, assisting with and/or performing specified tests, performing clerical duties and maintaining professional communication. Provides supervised learning in college laboratory/and or cooperating agencies. Lecture 2 hours. Laboratory 6 hours. Total 8 hours per week.

MDL 190 Coordinated Internship in Medical Laboratory (3 CR) Supervises on-the-job training in medical laboratory service firms coordinated by the college. Laboratory 6 hours per week.

MEC - MECHANICAL ENGINEERING TECHNOLOGY

MEC 113 Materials and Processes of Industry (3 CR) Studies engineering materials and accompanying industrial manufacturing processes. Investigates nature of materials structure and properties from a design standpoint. Analyzes the effects of the various processes on materials and the process themselves. Includes machining, casting, forming, molding, hot/cold working, chipless machining, and welding. Addresses quality assurance and inspection procedures. Lecture 3 hours per week.

MEC 119 Introduction to Basic CNC and CAM (3 CR) Prerequisite: MTE 1, 2 and 3 or divisional approval. Teaches the basic concepts of Computer Numerical Control (CNC) programming of Numerical Control Machinery with emphasis on Computer Aided Manufacturing (CAM)/ Computer Aided Drafting (CAD). Program writing procedures will be based on using the following: basic G-code programming language for CNC machinery, CAD/CAM programming systems to

produce correct code for CNC Machinery, basic computer usage, CAD/CAM integration, and Code-to-machine transfer via Distributive Numeric Control (DNC). Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

MEC 131 Mechanics I – Statics for Engineering Technology (3 CR) Prerequisite: MTH 115 or equivalent. Corequisite: MTH 116 or equivalent. 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 Materials for Engineering Technology (3 CR) Prerequisite: MEC 131. 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 CR) Prerequisite: divisional approval. 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. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

MEC 155 Mechanisms (2 CR) Studies the purpose and actions of cams, gear trains, levers, and other mechanical devices used to transmit control. Focuses on motions, linkages, velocities, and acceleration of points within a link mechanism; layout method for designing cams and gear grain. Requires preparation of weekly laboratory reports. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

MEC 162 Fluid Mechanics – Applied Hydraulics/Pneumatics (3 CR) Introduces hydraulic and pneumatic systems found in construction equipment, road vehicles, and farm equipment. Includes the basic theory, construction, maintenance, and repair of hydraulic and pneumatic power systems. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

MEC 205 - Piping and Auxiliary Systems (3 CR) Studies threaded pipe, welded pipe, isometric pipe sketching and layout, gaskets, packing, industrial hoses and tubing, basic steam system operations, automatic and manual valves, and positive displacement pumps. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

MEN – MENTAL HEALTH

MEN 100 Introduction to Mental Health (3 CR) Prerequisite or Corequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Surveys history of mental health from ancient to contemporary times, with special emphasis on impact of the psychoanalytic, humanistic, and behavioral movements in the treatment of mental illness. Includes examination of structure and functions of human service delivery systems, knowledge and skills of mental health workers, and current ethical and legal issues. Lecture 3 hours per week.

MEN 101-102 Mental Health Skills Training I-II (3 CR, 3 CR) Prerequisite for MEN 102: MEN 101. Prerequisite or Corequisite for MEN 101: A placement recommendation for ENG 111, co-enrollment

in ENF 3/ENG 111, or successful completion of all developmental English requirements. 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 221 Group Process I (3 CR) Prerequisite: MEN 101-102. Studies the stages of group development, role of the group leader, and contemporary models of group counseling utilized in mental health counseling. Includes experiential training in group leadership. Lecture 3 hours per week.

MEN 225 Counseling Therapy (3 CR) Prerequisite or Corequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. 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 in Mental Health (5 CR) Prerequisites: MEN 100, MEN 101, and MEN 102, or divisional approval. Provides supervised experience in a community mental health/ human services agency. Students will spend 2 hours per week in a seminar class and a total of 180 hours at the placement site. Arrangements for placement are made the semester prior to the one in which the student actually takes the class. Contact the Internship Coordinator in March to make plans for a fall or summer semester placement or in October to plan for a spring semester placement.

MKT - MARKETING

MKT 100 Principles of Marketing (3 CR) Presents principles, methods, and problems involved in the marketing of goods, services and ideas to consumers and organizational buyers. Discusses present-day problems and policies connected with distribution and sale of products, pricing, promotion, and buyer motivation. Examines variations of the marketing mix and market research, plus legal, social, ethical, e-commerce and international considerations in marketing. Lecture 3 hours per week.

MKT 110 Principles of Selling (3 CR) Presents a fundamental, skills-based approach to selling and relationship building. Emphasizes learning effective interpersonal communication skills in all areas of the sales process through skill-building activities. Examines entry-level sales careers in retailing, wholesaling, services and industrial selling. Lecture 3 hours per week.

MKT 220 Principles of Advertising (3 CR) 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.

MTH - MATHEMATICS

MTH 115-116 Technical Mathematics I-II (3 CR, 3 CR) Prerequisites: MTE 1, 2, 3, 4, 5 and 6 or a placement recommendation for MTH 115 or MTH 116 or equivalent. Presents algebra through exponential and logarithmic functions, trigonometry, vectors, analytic geometry, and complex numbers. Lecture 3 hours per week.

MTH 120 Introduction to Mathematics (3 CR) Prerequisites: MTE 1, 2, and 3 or a placement recommendation for MTH 120 or equivalent. Introduces number systems, logic, basic algebra, and descriptive statistics. Intended for occupational/technical programs. Lecture 3 hours per week.

MTH 151 Mathematics for the Liberal Arts I (3 CR) Prerequisites: MTE 1, 2, 3, 4, and 5 or a placement recommendation for MTH 151 or equivalent. Presents topics in sets, logic, numeration systems, geometric systems, and elementary computer concepts. Lecture 3 hours per week.

MTH 152 Mathematics for the Liberal Arts II (3 CR) Prerequisites: MTE 1, 2, 3, 4, and 5 or a placement recommendation for MTH 152 or equivalent. Presents topics in functions, combinatorics, probability, statistics and algebraic systems. Lecture 3 hours per week.

MTH 157 Elementary Statistics (3 CR) Prerequisites: MTE 1, 2, 3, 4 and 5 or a placement recommendation for MTH 157 or equivalent. Presents elementary statistical methods and concepts including descriptive statistics, estimation, hypothesis testing, linear regression, and categorical data analysis. Credit will not be awarded for both MTH 157 and MTH 241. Lecture 3 hours per week.

MTH 163 Pre-Calculus I (3 CR) Prerequisites: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9 or a placement recommendation for MTH 163 or equivalent. Presents college algebra, matrices, and algebraic, exponential, and logarithmic functions. Credit will not be awarded for both MTH 163 and 166. Lecture 3 hours per week.

MTH 166 Pre-Calculus with Trigonometry (5 CR) Prerequisites: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9 or a placement recommendation for MTH 166 or equivalent. Presents college algebra, analytic geometry, trigonometry, and algebraic, exponential, and logarithmic functions. Credit will not be awarded for both MTH 163 and MTH 166. Lecture 5 hours per week.

MTH 173 Calculus with Analytic Geometry I (4 CR) Prerequisites: MTH 166 or a placement recommendation for MTH 173 and four units of high school mathematics including Algebra I, Algebra II, Geometry and Trigonometry or equivalent. (Credit will not be awarded for more than one of MTH 173, MTH 175, or MTH 271.) 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 mathematics, physical and engineering science programs. Lecture 4 hours per week.

MTH 174 Calculus with Analytic Geometry II (4 CR) Prerequisites: MTH 173 or equivalent. (Credit will not be awarded for more than one of MTH 174, MTH 176, or MTH 272.) 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 mathematics, physical and engineering science programs. Lecture 4 hours per week.

MTH 177 Introductory Linear Algebra (2 CR) Corequisite: MTH 173 or equivalent. Covers matrices, vector spaces, determinants, solutions of systems of linear equations, and eigen values. Designed for mathematical, physical, and engineering science programs. Lecture 2 hours per week.

MTH 241 Statistics I (3 CR) Prerequisites: MTH 163 or MTH 166 or a placement recommendation for MTH 241 or equivalent. Covers descriptive statistics, elementary probability, probability distributions, estimation, and hypothesis testing. Uses a computer package to solve case studies. Lecture 3 hours per week.

MTH 242 Statistics II (3 CR) Prerequisites: MTH 241 or equivalent. Continues the study of estimation and hypothesis testing with emphasis on correlation and regression, analysis of variance, chi-square test, and non-parametric methods. Presents linear programming, network theory, project scheduling, and other quantitative applications. Uses a computer package to solve case studies. Lecture 3 hours per week.

MTH 271 Applied Calculus I (3 CR) Prerequisite: MTH 163 or MTH 166 or a placement recommendation for MTH 271 or equivalent. Presents limits, continuity, differentiation of Algebraic and transcendental functions with applications, and an introduction to integration. Lecture 3 hours per week.

MTH 272 Applied Calculus II (3 CR) Prerequisites: MTH 271 or equivalent. Covers techniques of integration, multivariable calculus, and an introduction to differential equations. Lecture 3 hours per week.

MTH 277 Vector Calculus (4 CR) Prerequisite: MTH 174 or equivalent. Presents vector valued functions, partial derivatives, multiple integrals, infinite series, and topics from the calculus of vectors. Designed for mathematical, physical, and engineering science programs. Lecture 4 hours per week.

MTH 285 Linear Algebra (3 CR) Prerequisite: MTH 174 or equivalent. Covers matrices, vector spaces, determinants, solutions of systems of linear equations, basis and dimension, Eigen values, and Eigen vectors. Designed for mathematical, physical and engineering science programs. Lecture 3 hours per week.

MTH 287 Mathematical Structures (3 CR) Corequisite: MTH 174 or equivalent. Presents topics in mathematical structures of value to students majoring in Computer Science or other disciplines requiring programming skills. Covers logic, set theory, number theory, combinatorics, functions, relations, and graph theory. Lecture 3 hours per week.

MTH 291 Differential Equation (3 CR) Corequisite: MTH 277 or equivalent. Introduces first order differential equations, linear differential equations, numerical methods, and applications. Designed for mathematical, physical, and engineering science programs. Lecture 3 hour per week.

MTE - MATH ESSENTIALS

MTE 1 Operations with Positive Fractions (1 CR) Prerequisite(s): MATH 2140 or a qualifying placement score. 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. Credit for this course can be received by completing the appropriate MTT course. Lecture 1 hour per week.

MTE 2 Operations with Positive Decimals and Percents (1 CR) Prerequisite(s): MTE 1 or qualifying placement score. 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. Credit

for this course can be received by completing the appropriate MTT course. Lecture 1 hour per week.

MTE 3 Algebra Basics (1 CR) Prerequisite(s): MTE 2 or qualifying placement score. Includes basic operations with algebraic expressions and solving simple algebraic equations using signed numbers with emphasis on applications. Credit is not applicable toward graduation. Credit for this course can be received by completing the appropriate MTT course. Lecture 1 hour per week.

MTE 4 First Degree Equations and Inequalities in One Variable (1 CR) Prerequisite(s): MTE 3 or qualifying placement score. 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. Credit for this course can be received by completing the appropriate MTT course. Lecture 1 hour per week.

MTE 5 Linear Equations, Inequalities and Systems of Linear Equations in Two Variables (1 CR) Prerequisite(s): MTE 4 or qualifying placement score. 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. Credit for this course can be received by completing the appropriate MTT course. Lecture 1 hour per week.

MTE 6 Exponents, Factoring and Polynomial Equations (1 CR) Prerequisite(s): MTE 5 or qualifying placement score. 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. Credit for this course can be received by completing the appropriate MTT course. Lecture 1 hour per week.

MTE 7 Rational Expressions and Equations (1 CR) Prerequisite(s): MTE 6 or qualifying placement score. Includes simplifying rational algebraic expressions, solving rational algebraic equations and solving applications that use rational algebraic equations. Credit is not applicable toward graduation. Credit for this course can be received by completing the appropriate MTT course. Lecture 1 hour per week.

MTE 8 Rational Exponents and Radicals (1 CR) Prerequisite(s): MTE 7 or qualifying placement score. Includes simplifying radical expressions, using rational exponents, solving radical equations and solving applications using radical equations. Credit is not applicable toward graduation. Credit for this course can be received by completing the appropriate MTT course. Lecture 1 hour per week.

MTE 9 Functions, Quadratic Equations and Parabolas (1 CR) Prerequisite(s): MTE 8 or qualifying placement score. 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. Credit for this course can be received by completing the appropriate MTT course. Lecture 1 hour per week.

MTS - MOTORSPORTS MANAGEMENT & TECHNOLOGY

MTS 130 Motorsports Structural Technology I (3 CR)

Prerequisite(s): MTS 125 and WEL 130. Introduces the student to the basic design and fabrication of a racecar. Develops skills for use of the tools, equipment, and materials in the production of a racecar. Emphasizes safety, accuracy, and aesthetics of the racecar and the work environment. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

MTT - DEVELOPMENTAL MATHEMATICS

MTT 1 Developmental Mathematics I (1 CR) Covers mathematics topics in a technology-based setting to prepare students for the study of college level mathematics courses and curricula. Designed for the study of one developmental math unit prescribed by the student's placement test results. Credits not applicable towards graduation.

MTT 2 Developmental Mathematics II (2 CR) Covers mathematics topics in a technology-based setting to prepare students for the study of college level mathematics courses and curricula. Designed for the study of two developmental math units prescribed by the student's placement test results. Credits not applicable towards graduation.

MTT 3 Developmental Mathematics III (3 CR) Covers mathematics topics in a technology-based setting to prepare students for the study of college level mathematics courses or curricula. Designed for the study of three developmental math units prescribed by the student's placement test results. Credits not applicable towards graduation.

MTT 4 Developmental Mathematics IV (4 CR) Covers mathematics topics in a technology-based setting to prepare students for the study of college level mathematics courses or curricula. Designed for the study of four developmental math units prescribed by the student's placement test results. Credits not applicable towards graduation.

MUS – MUSIC

MUS 121-122 Music Appreciation I-II (3 CR, 3 CR) Increases the variety and depth of the student's interest, knowledge, 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 130 Overview of the Recording Industry (1 CR) Prerequisite: divisional approval. Introduces and surveys employment opportunities in the commercial music industry. Assists students in defining their professional goals. Lecture 1 hour per week.

MUS 140 Introduction to Recording Techniques (3 CR) Introduces students to the theory of and practices in digital audio. Describes basic background of the history of audio, culminating with hands-on operation of a digital audio workstation (DAW). The student is not expected to have any previous musical experience. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

MUS 163-164 Guitar Theory and Practice I-II (3 CR, 3 CR)

Prerequisite for MUS 164: MUS 163 or divisional approval. 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. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

MUS 225 - The History of Jazz (3 CR) 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.

NAS – NATURAL SCIENCE

NAS 131-132 - Astronomy I-II (4 CR) Prerequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Studies the major and minor bodies of the solar system, stars and nebulae of the milky way, and extragalactic objects. Examines life and death of stars, origin of the universe, history of astronomy, and instruments and techniques of observation. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

NUR – NURSING

NUR 21 Nurse Aide Clinical Experience (1 CR) Provides guided nurse aide experience for practicing skills in the clinical setting. Applies fundamental principles of basic nurse aide care. Laboratory 3 hours per week.

NUR 25 Nursing Assistant (3 CR) Teaches fundamentals of patient care with laboratory experience in foods and fluids, elimination, moving patients, morning, afternoon and evening care, care of hospital equipment, means of providing special comforts and safety, and admission and discharge procedures. Lecture 2 hours. Laboratory 4 hours. Total 6 hours per week.

NUR 27 Nurse Aide I (4 CR) Teaches care of older patients with emphasis on the social, emotional, and spiritual needs. Covers procedures; communication and interpersonal relations; observation, charting and reporting; safety and infection control; anatomy and physiology; personal care, nutrition and patient feeding; death and dying. May include laboratory or clinical hours. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

NUR 90 Coordinated Internship in Nursing (1 CR) Supervises on-the-job training in selected business, industrial or service firms coordinated by the college. Students will participate in clinical experience in a Long Term Care Health and Rehabilitation environment with a clinical instructor. 30 hours per semester.

NUR 111 Nursing 1 (7CR) 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 112 Nursing II (8CR) Focuses on the nursing care of adults experiencing changes along the health/illness continuum that are common, well-defined, and have predictable outcomes. Includes math computational skills, basic computer instruction related to the delivery of nursing care; acid-base balance, gastrointestinal, genitourinary, musculoskeletal, immunology, oncology, sensori-neural, infectious diseases, endocrine, respiratory and blood disorders and care of the dying client. Provides supervised learning experiences in college nursing laboratories and/or cooperating agencies. Lecture 3 hours. Laboratory 15 hours. Total 18 hours per week.

NUR 135 Drug Dosage Calculations (2 CR) Focuses on apothecary, metric, household conversion in medication dosage calculation for adult and pediatric clients. Provides a practical approach to learning to calculate and prepare medications and solutions. Includes calculating intravenous flow rates. Lecture 2 hours per week.

NUR 211 Second Level Nursing I (7CR) Emphasizes complex nursing care of individuals, families and/or groups in various stages of development who are experiencing alterations related to their biopsychosocial needs. Uses all components of the nursing process with increasing degrees of skill. Includes math computation skills, basic computer instruction related to the delivery of nursing care; gastrointestinal, hepatic, cardiac/cardiovascular, oncological, and endocrine disorders. Provides supervised learning experience in college nursing laboratories and/or cooperating agencies. Lecture 5 hours. Laboratory 6 hours. Total 11 hours per week.

NUR 212 Second Level Nursing II (7CR) Emphasizes complex nursing care of individuals, families, and/or groups in various stages of development who are experiencing alterations related to their biopsychosocial needs. Uses all components of the nursing process with increasing degrees of skill. Includes math computation skills, basic computer instruction related to the delivery of nursing care; neurological cardiovascular; respiratory; eye, ear, nose and throat disorders. May also include: emergency, renal and digestive disorders. Provides supervised learning experience in college nursing and/or cooperating agencies. Lecture 4 hours. Laboratory 9 hours. Total 13 hours per week.

NUR 226 Health Assessment (2CR) Introduces the systematic approach to obtaining a health history and performing a physical assessment. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

NUR 230 Pharmacology (3CR) 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 (3CR) Develops nursing skills in caring for families in the antepartum, intrapartum, and post-partum periods. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

NUR 246 Parent/Child Nursing (3CR) 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 hours. Total 5 hours per week.

NUR 247 Psychiatric/Mental Health Nursing (3 CR) 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.

PED – PHYSICAL EDUCATION AND RECREATION

(All PED courses are approved to meet the HLT/PED requirement.)

PED 100 Pilates (1 CR) Provides a method of mind-body exercise and physical movement designed to stretch, strengthen, balance the body, and improve posture and core stabilization while increasing body awareness. Laboratory 2 hours per week.

PED 101-102 Fundamentals of Physical Activity I-II (1 CR, 1 CR) 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. Laboratory 2 hours per week.

PED 103-104 Aerobic Fitness I-II (1 CR, 1 CR) Develops cardiovascular fitness through activities designed to elevate and sustain heart rates appropriate to age and physical condition. Laboratory 2 hours per week.

PED 105-106 Aerobic Dance I-II (1 CR, 1 CR) Focuses on physical fitness through dance exercises. Emphasizes the development of cardiovascular endurance, muscular endurance, and flexibility. Laboratory 2 hours per week.

PED 107 Exercise and Nutrition I (2 CR) Provides for the study and application of fitness and wellness and their relationship to a healthy lifestyle. Defines fitness and wellness, evaluates the student's level of fitness and wellness. Students will incorporate physical fitness and wellness into the course and 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 109 Yoga (1 CR) Focuses on the forms of yoga training emphasizing flexibility. Laboratory 2 hours per week.

PED 111-112 Weight Training I-II (1 CR, 1 CR) Focuses on muscular strength and endurance training through individualized workout programs. Teaches appropriate use of weight training equipment. Laboratory 2 hours per week.

PED 120 Yoga II (1 CR) Prerequisite: PED 109. Focuses on the forms of yoga training emphasizing flexibility. Laboratory 2 hours per week.

PED 123-124 Tennis I-II (1 CR, 1 CR) Teaches tennis skills with emphasis on stroke development and strategies for individual and team play. Includes rules, scoring, terminology, and etiquette. Laboratory 2 hours per week.

PED 129 Self-Defense (1 CR) Examines history, techniques, and movements associated with self-defense. Introduces the skills and methods of self-defense emphasizing mental and physical discipline. Laboratory 2 hours per week.

PED 133-134 Golf I-II (1 CR, 1 CR) Teaches basic skills of golf, rules, etiquette, scoring, terminology, equipment selection and use, and strategy. Laboratory 2 hours per week.

PED 135-136 Bowling I-II (2 CR, 2 CR) Teaches basic bowling skills and techniques, scoring, rules, etiquette, and terminology. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

PED 137 Martial Arts I (2 CR) Emphasizes forms, styles, and techniques of body control, physical and mental discipline, and physical fitness. Presents a brief history of development of martial arts theory and practice. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

PED 144 Skin and Scuba Diving (2 CR) Emphasizes skills and methods of skin and scuba diving. Includes training with underwater breathing apparatus and focuses on safety procedures, selection and use of equipment. Prerequisite strong swimming skills. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

PED 147 Hiking (1 CR) Introduces physical and mental benefits of walking or hiking as a form of physical exercise. Skills developed include how to plan for a hike, what to take, and how to select a trail relative to individual abilities. Provides hiking opportunities to explore local regions. Develops awareness of safety, weather, and ecological considerations. Laboratory 2 hours per week.

PED 149 Cardio Sculpt I (1 CR) Combines strength training and cardiovascular workouts that strengthen the major muscle groups as well as developing endurance. Laboratory 2 hours per week.

PED 154 Volleyball (1-2 CR) Introduces skills, techniques, strategies, rules, and scoring. Lecture 0-1 hours. Laboratory 2-4 hours per week.

PED 170 Tai Chi I (1 CR) Develops an understanding of the theories and practices of Tai Chi. Explores the energy of exercise that will tone muscles, improve circulation and increase flexibility and balance. Discusses history and philosophy of exercise and relaxation techniques for stress reduction. Laboratory 2 hours per week.

PED 183 Outdoor Adventures I (1 CR) Introduces outdoor adventure activities with emphasis on basic skills, preparation, personal and group safety, equipment selection and use, ecology, and field experience. Laboratory 2 hours per week.

PED 188 Freshwater Fishing (1 CR) 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 270 Tai Chi II (1 CR) Develops and understanding of the theories and practices of Tai Chi. Explores the energy of exercise that will tone muscles, improve circulation and increase flexibility and balance. Discusses history and philosophy of exercise and relaxation techniques for stress reduction. Laboratory 2 hours per week.

PHI – PHILOSOPHY

PHI 101 Introduction to Philosophy I (3 CR) 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 CR) Introduces inductive and deductive reasoning, with an emphasis on common errors and fallacies. Lecture 3 hours per week.

PHI 220 Ethics (3 CR) Provides a systematic study of representative ethical systems. Lecture 3 hours per week.

PHT - PHOTOGRAPHY

PHT 101-102 Photography I-II (3 CR) Prerequisite for PHT 102: PHT 101. 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 164 Introduction to Digital Photography (3 CR) Teaches the fundamentals of photography including camera function, composition, and image production as they apply to digital imagery. Lecture 1 hour. Laboratory 4 hours. Total 5 hours per week.

PHT 264 Digital Photography (3 CR) Prerequisite: PHT 164 or divisional approval. 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.

PHY – PHYSICS

PHY 201 General College Physics I (4 CR) Prerequisites: MTH 115 or MTH 163 or MTH 166 or equivalent and a placement recommendation for ENG 111 or successful completion of all required developmental English courses.

PHY 202 General College Physics II (4 CR) Prerequisite: PHY 201

A non-calculus introductory college physics sequence. Teaches fundamental principles of physics. Covers mechanics, thermodynamics, wave phenomena, electricity, magnetism, and selected topics in modern physics. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PHY 241 University Physics I (4 CR) Prerequisite: MTH 173, Corequisite: MTH 174

PHY 242 University Physics II (4 CR) Prerequisite: MTH 174 and PHY 241

An introductory calculus-based physics sequence recommended for engineering, physics, computer science, and mathematics majors. Teaches principles of classical and modern physics. Includes mechanics, wave phenomena, heat, electricity, magnetism, relativity and nuclear physics. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PLS – POLITICAL SCIENCE

PLS 211-212 U.S. Government I-II (3 CR, 3 CR) 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 225 The United States Presidency (3 CR) Describes the modern American presidency. Focuses on the presidency and many issues related to that office; the people, the powers, and the current environment in which the presidents serve. Lecture 3 hours per week.

PLS 241 International Relations I (3 CR) Teaches geographic, demographic, economic, ideological, and other factors conditioning the policies of countries and discusses conflicts and their adjustment. Lecture 3 hours per week.

PLS 242 International Relations II (3 CR) Teaches foreign policies of the major powers in the world community with an emphasis on the role of the United States in international politics. Lecture 3 hours per week.

PNE - PRACTICAL NURSING

PNE 110-111 Practical Nursing Health and Disease I-II (5 CR, 5 CR) Studies the pathophysiology, signs and symptoms, prescribed medical and surgical treatments, and appropriate nursing care for the patient with selected disorders. Lecture 5 hours per week.

PNE 120 Introduction to Nursing Process (1 CR) Introduces the nursing process. Develops basic skills to ensure quality nursing care. Lecture 1 hour per week.

PNE 135 Maternal and Child Health Nursing (5 CR) Examines pregnancy, childbirth, postpartum and newborn care from a family centered approach. Covers complications related to childbearing. Emphasizes growth and development and exploration of common childhood disorders at various stages. Lecture 4 hours. Laboratory 3 hours. Total 7 hours per week.

PNE 141-142 Nursing Skills I-II (3 CR, 3 CR) Studies principles and procedures essential to the basic nursing care of patients. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

PNE 145 Trends in Practical Nursing (1 CR) Studies the role of the Licensed Practical Nurse. Covers legal aspects, organizations, and opportunities in practical nursing. Designed to assist the student in preparation for employment. Lecture 1 hour per week.

PNE 155 Body Structure and Function (4 CR) Studies the structure and function of the body. Lecture 4 hours per week.

PNE 156 Nursing Across the Life Span (4 CR) Focuses on the principles of nursing relevant to assisting the individual during the growth and development process across the life span. Lecture 4 hours per week.

PNE 158 Mental Health and Psychiatric Nursing (2 CR) Recognizes emotional needs of patients. Provides knowledge of the role that emotions play. Enables students to understand their own behavior as well as patient behavior. Lecture 2 hours per week.

PNE 174 Applied Pharmacology for Practical Nurses (2 CR) Applies problem solving skills in preparing and administering medications. Studies history, classification, sources, effects, and legalities of drugs. Emphasizes major drug classes and specific agents within each class. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

PNE 181-182 Clinical Experience I-II (5 CR, 5 CR) Provides guided nursing experiences in the hospital setting. Practices skills and applies principles of nursing in basic areas. Includes supervision in administration of medicines. Encourages students to develop basic skills in analyzing patient needs and making nursing decisions. Laboratory 15 hours per week.

PSY – PSYCHOLOGY

PSY 120 Human Relations (3 CR) Introduces the theory and practice of effective human relations. Increases understanding of self and others and interpersonal skills needed to be a competent and cooperative communicator. Lecture 3 hours per week.

PSY 200 Principles of Psychology (3 CR) Prerequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Surveys the basic concepts of psychology. Covers the scientific study of behavior and mental processes, research methods and

measurement, theoretical perspectives, and application. Includes biological bases of behavior, learning, social interactions, memory, and personality; and other topics such as sensation, perception, consciousness, thinking, intelligence, language, motivation, emotion, health, development, psychological disorders, and therapy. Lecture 3 hours per week.

PSY 215 Abnormal Psychology (3 CR) Prerequisites: PSY 200, 201 or 202. 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. Lecture 3 hours per week.

PSY 216 Social Psychology (3 CR) Prerequisites: PSY 200, 201, or 202. Examines individuals in social contexts, their social roles, group processes and intergroup relations. Includes topics such as small group behavior, social behavior, social cognition, conformity, attitudes, and motivation. Lecture 3 hours per week.

PSY 220 Introduction to Behavior Modification (3 CR) Prerequisite or Corequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Studies the history of behaviorism and the principles and applications of behavior modification. Emphasizes observation and application of behavior modification principles. Lecture 3 hours per week.

PSY 225 Theories of Personality (3 CR) Prerequisites: PSY 200, 201 or 202. Studies the major personality theories and their applications. Includes psychodynamic, behavioral, cognitive, and humanistic perspectives. Lecture 3 hours per week.

PSY 230 Developmental Psychology (3 CR) Prerequisite or Corequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Studies the development of the individual from conception to death. Follows a life-span perspective on the development of the person's physical, cognitive, and psychosocial growth. Lecture 3 hours per week.

PSY 235 Child Psychology (3 CR) Prerequisite or Corequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. 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.

PSY 236 Adolescent Psychology (3 CR) Prerequisite or Corequisite: A placement recommendation for ENG 111, co-enrollment in ENF 3/ENG 111, or successful completion of all developmental English requirements. Studies development of the adolescent. Investigates physical, intellectual, social, and emotional factors of the individual from late childhood to early adulthood. Lecture 3 hours per week.

PSY 270 Human Sexuality (3 CR) Prerequisites: PSY 200, PSY 201 or PSY 202. Focuses on scientific investigation of human sexuality and psychological and social implications of such research. Considers socio-cultural influences, the physiology and psychology of sexual response patterns, sexual dysfunctions, and development of relationships. Lecture 3 hours per week.

RAD – RADIOGRAPHY

RAD 111-112 Radiologic Science I-II (4 CR, 4 CR) Teaches concepts of radiation, radiography physics, fundamentals of electromagnetic radiation, electricity and magnetism, and application of these principles to radiography. Focuses on X-ray production, emission, and X-ray interaction with matter. Develops skills in analysis, quantification and synthesis, and applies problem-solving strategies. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

RAD 115 Principles of Magnetic Resonance Imaging (3 CR)
Prerequisite: ARRT or eligible. Presents concepts of Magnetic Resonance Imaging and Physics. Teaches fundamentals of Magnetic Resonance and application of principles. Lecture 3 hours per week.

RAD 121 Radiographic Procedures I (4 CR) Introduces procedures for positioning the patient's anatomical structures relative to X-ray beam and image receptor. Emphasizes procedures for routine examination of the chest, abdomen, extremities, and axial skeleton. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

RAD 125 Patient Care Procedures (3 CR) Presents the care and handling of the sick and injured patient in the Radiology Department. Introduces the fundamentals of nursing procedures, equipment, and supplies specific to radiology. Lecture 3 hours per week.

RAD 131-132 Elementary Clinical Procedures I-II (3 CR, 3 CR)
Develop advanced technical skills in fundamental radiographic procedures. Focuses on introduction to radiography, basic radiation safety, manipulation of equipment, patient care, osseous studies, skull procedures, and contrast studies. Provides clinical experience in cooperating health agencies. Clinical 15 hours per week.

RAD 190 Coordinated Internship (3 CR) Prerequisite: RAD 132.
Introduces advanced technical skills in fundamental radiographic procedures. Focuses on basic contrast media studies, osseous studies, and skull procedures. Provides clinical experiences in health care agencies. Clinical 15 hours per week.

RAD 196 On-Site CT (Computed Tomography) Training (1CR)
Prerequisite: ARRT or eligible. Specializes in career orientation and training program without pay in selected businesses and industry, supervised and coordinated by the college. Credit/work ratio not to exceed 1:5 hours. May be repeated for credit. Laboratory 5 hours per week.

RAD 205 Radiation Protection and Radiobiology (3 CR) Studies methods and devices used for protection from ionizing radiation. Teaches theories of biological effects, cell and organism sensitivity, and the somatic and genetic effects of ionizing radiation. Presents current radiation protection philosophy for protecting the patient and technologist. Lecture 3 hours per week.

RAD 215 Correlated Radiographic Theory (2 CR) Presents intensive correlation of all major radiologic technology subject areas. Studies interrelationships of biology, physics, principles of exposure, radiologic procedures, patient care, and radiation protection. Lecture 2 hours per week.

RAD 221 Radiographic Procedures II (4 CR) Prerequisite: RAD 121. Continues procedures for positioning the patient's anatomical structures relative to X-ray beam and image receptor. Emphasizes

procedures for routine examination of the skull, contrast studies of internal organs, and special procedures employed in the more complicated investigation of the human body. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

RAD 228 Enhanced Patient Care for Computed Tomography Imaging (3 CR) Applies critical thinking skills including but not limited to patient assessment and care, contract administration, and radiation safety, as related to those patients receiving CT diagnostic/interventional imaging services. Lecture 3 hours per week.

RAD 231-232 Advanced Clinical Procedures I-II (5 CR, 5 CR)
Reinforces technical skills in fundamental radiographic procedures. Introduces more intricate contrast media procedures. Focuses on technical proficiency, application of radiation, protection, nursing skills, and exposure principles. Teaches advanced technical procedures and principles of imaging modalities, correlating previous radiographic theory, focusing on full responsibility for patients in technical areas, perfecting technical skills, and developing awareness of related areas utilizing ionizing radiation. Provides clinical experience in cooperating health agencies. Clinical 25 hours per week.

RAD 240 Radiographic Pathology (3 CR) Presents a survey of common medical and surgical disorders that affect radiographic image. Discusses conditions related to different systems of the human body. Studies the correlation of these conditions with radiographs. Lecture 3 hours per week.

RAD 242 Computed Tomography Procedures and Instrumentation (2CR) Prerequisite: ARRT or eligible. Focuses on the patient care, imaging procedure and physics, and instrumentation related to computed tomography imaging. Lecture 2 hours per week.

RAD 243 Clinical Internship in Computed Tomography (1 CR)
Prerequisite: ARRT or eligible, RAD 196. Develops clinical skills in computed tomography imaging procedures. Laboratory 5 hours per week.

RAD 244 Case Studies in CT (Computed Tomography) (1 CR)
Prerequisite: ARRT or eligible. Presents case studies in computed tomography. Focuses on both abnormal and normal studies. Lecture 1 hour per week.

RAD 245 Radiologic Specialties (2 CR) Introduces the study of treatment of disease as it relates to various imaging modalities, computerized tomography, and magnetic resonance imaging. Introduces computers and other innovations in radiology. Emphasizes theory, principle of operation, and clinical application of these topics. Lecture 2 hours per week.

RAD 247 Cross-Sectional Anatomy (3 CR) Prerequisite: ARRT or eligible. Presents a specialized study of cross-sectional anatomy relevant to sectional imaging modalities such as computed tomography and magnetic resonance imaging. Lecture 3 hours per week.

RAD 248 Case Studies in Magnetic Resonance Imaging (MR) (3 CR) Prerequisite: ARRT or eligible. Introduces student to role of collaborator in patient care by providing the critical thinking skills necessary to implement appropriate examination protocols and patient care essential for obtaining diagnostic images. Features cases that can be performed via Magnetic Resonance (MR) simulation or from actual MR examinations. Lecture 3 hours per week.

RAD 249 Comprehensive Foundations of Breast Imaging

(3 CR) Prerequisite: ARRT or eligible. Provides the American Registry of Radiologic Technologists (ARRT) registered radiologic technologists with the educational foundation needed to complete the Mammography Quality Standards Act (MQSA) and ARRT requirements of didactic education (clinical requirements not included) necessary to prepare for the ARRT certification exam in mammography. Lecture 3 hours per week.

RAD 251 Enhanced Patient Care for Magnetic Resonance (MR) Imaging

(3 CR) Prerequisite: ARRT or eligible. Applies critical thinking skills including but not limited to patient assessment and care, contrast administration and magnet safety as related to those patients receiving MR services. Lecture 3 hours per week.

RAD 252 Foundational Mammography Clinical Training

(1 CR) Prerequisite: ARRT or eligible. Designed to meet the initial MQSA/ARRT 25 supervised clinical mammography examinations mandated for students preparing to take the certification exam in mammography. The remaining mandatory exams are not included in this course and will be the responsibility of the student to obtain. Laboratory 2 hours per week.

RAD 290 Coordinated Internship (3 CR) Prerequisite: RAD 232. Provides additional experience in radiographic procedures, demonstrating skills in technical proficiency, patient care procedures, radiation protection, and evaluation of experience in cooperating health agencies. Clinical 15 hours per week.

RAD 293 Studies In Radiography (3 CR) Prerequisite: ARRT or eligible. Covers new content not covered in existing courses in the discipline. Allows instructor to explore content and instructional methods to assess the course's viability as a permanent offering. Lecture 3 hours per week.

REL – RELIGION

REL 200 Survey of the Old Testament (3 CR) 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 CR) Surveys 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 CR) Introduces the religions of the world with attention to origin, history, and doctrine. Lecture 3 hours per week.

REL 231-232 Religions of the World I-II (3 CR) Studies religions of the world with attention to origin, history, and doctrine. Lecture 3 hours per week.

REL 237 Eastern Religions (3 CR) 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 247 History of Christianity (3 CR) Surveys the development of Christianity from its origins to the present. Lecture 3 hours per week.

ROC – RADIATION ONCOLOGY

ROC 110 Introduction to Radiation Oncology (2 CR) Presents an overview of the field of Radiation Oncology, focusing on medical and technical terminology, practices and procedures, treatment charts, roles of staff, clinical objectives, treatment modalities, and equipment. Other topics include patient care, psychosocial issues, ethics and legal considerations of patient management. Lecture 2 hours per week.

ROC 115 Therapeutic Radiation Safety (1 CR) Presents an overview of radiation protection focusing on detection and measurement, shielding and room design, somatic and genetic effects, maximum permissible dose, surveys, source handling, personnel monitoring, and organizations and agencies that guide radiation protection procedures. Lecture 1 hour per week.

ROC 120 Radiation Oncology/Pathology I (3 CR) Prerequisite: ROC 110. Introduces malignant pathology arising in each anatomical site, radiation treatment rationale, treatment techniques, and radiobiological response. Lecture 3 hours per week.

ROC 121 Radiation Oncology/Pathology II (3 CR) Prerequisites: ROC 110, ROC 120. A continuation of Radiation Oncology I, which focuses on malignant pathology arising in each anatomical site, radiation rationale, treatment techniques, and radiobiological response. Lecture 3 hours per week.

ROC 125 Pre-Clinical Techniques in Radiation Oncology (2 CR) Focuses on basic technical skills in preparation for patient set up and treatment in the clinical setting. Emphasizes simulation and treatment parameters. Focuses on students gaining basic understanding of basic techniques and patient care skills through phantom and lab work prior to direct patient contact. Lecture 2 hours per week.

ROC 131 Clinical Clerkship I (4 CR) Introduces students to the clinical setting and the basics of Radiation Oncology. Covers basic technical and patient care skills through supervised direct patient contact and phantom work. Lecture 1 hour. Laboratory 15 hours. Total 16 hours per week.

ROC 132 Clinical Clerkship II (5 CR) Prerequisite: ROC 131. The student continues supervised direct patient contact and phantom work with focus on technical skills related to equipment manipulation. With minimal assistance the student should be able to perform basic treatment and simulation procedures as well as basic patient care skills. Clinical 25 hours per week.

ROC 141 Therapy Physics I (2 CR) Prerequisites: ROC 110, MTH 163. Focuses on concepts of radiation production, interaction, and influencing factors. Emphasis is placed on atomic interactions and dose measurement techniques. Presents a comprehensive overview of the different types of machines used in Radiation Oncology. Lecture 2 hours per week.

ROC 142 Patient Care in Oncology (1 CR) Focuses on the unique needs of the cancer patient, including: site specific side effects, pharmacology, skin care, psychological and nutritional support, and patient care in emergency situations. Explores use of chemotherapeutic agents. Lecture 1 hour per week.

ROC 145 Quality Improvement (2 CR) Prerequisite: ROC 110. Methods for performing various quality assurance tasks will be discussed, including the medical record component, as well as standards and specification of therapeutic equipment. Allows the student to acquire the knowledge and ability to recognize inaccuracy of treatment delivery. Reviews warm-up guidelines. Lecture 2 hours per week.

ROC 151 Introduction to Cross-Sectional Anatomy (2 CR) Prerequisites: ROC 121. Corequisite: ROC 120. Introduces the study of basic anatomic structures and pathologies through digital concepts of medical imaging with emphasis on principles and practices of Radiation Oncology and diagnostic radiography. Lecture 2 hours per week.

ROC 225 Emerging Technologies in Radiation Oncology (1 CR) Corequisite: ROC 232. Focuses on new and advanced techniques in Radiation Oncology. Emphasizes emerging procedures in simulation and treatment relative to tumor site and modality. Lecture 1 hour per week.

ROC 231 Clinical Clerkship III (5 CR) Prerequisite: ROC 132. A continuation of Clinical Clerkship II, introduces the student to intermediate and complex treatment and simulation procedures as well as dosimetry, beam modification devices and brachytherapy competencies. The student should demonstrate proficiency in equipment manipulation and intermediate patient care skills. Clinical 25 hours per week.

ROC 232 Clinical Clerkship IV (5 CR) Prerequisite: ROC 231. The student performs intermediate procedures with minimal assistance and demonstrates comprehension of tasks related to complex procedures. During this clerkship the student should demonstrate the ability to work more independently. Clinical 25 hours per week.

ROC 241 Therapy Physics II (2 CR) Prerequisite: ROC 141. Studies methods and devices used for measurement of and protection from ionizing radiation. Discusses types of brachytherapy applicators and dose distributions systems and includes brachytherapy dose calculation exercises. Introduces electron beam dosimetry. Lecture 2 hours per week.

ROC 242 Clinical Radiobiology (2 CR) Prerequisites: ROC 110 and ROC 120. Corequisite: ROC 121. This course is an advance study into the principles of biologic responses to radiation. Focuses on the events that occur following absorption of energy from radiation at the cellular, tissue, and systemic whole body levels, and factors that influence the effects. Lecture 2 hours per week.

ROC 243 Dosimetry Planning (2 CR) Prerequisites: ROC 110, MTH 163. Introduces clinical dosimetry and treatment planning to include various treatment techniques, calculations, equations, and beam arrangements. Lecture 2 hours per week.

ROC 244 Professional Seminar (2 CR) Prerequisites/Corequisites: All Radiation Oncology Core Courses. Designed to correlate all major radiation oncology subject areas in preparation for national certification. Lecture 2 hours per week.

RVH - RV/MOTORCYCLE MAINTENANCE

RVH 130 Motorcycle Rider Safety - Beginner (1 CR) **This course is not eligible for financial aid.** Studies principles and basic skills of motorcycle riding with an emphasis on safety. Includes street strategies, protective gear, and selection and care/maintenance of motorcycles. Lecture 1 hour per week.

SAF – SAFETY

SAF 127 Industrial Safety (2 CR) Provides basic understanding of safety and health in an industrial situation. Includes hazardous materials, substances, conditions, activities and habits as well as the prescribed methods and equipment needed for the apprentice to protect himself/herself and others. Class attendance and completion of this course satisfies the 10-hour requirement to sit for the OSHA certification exam. Lecture 2 hours per week.

SDV – STUDENT DEVELOPMENT

SDV 100 College Success Skills (1 CR) This course will assist students in establishing a connection with the college using a small group format to acquaint students with other students and with policies and programs of the college. The course also helps students to achieve their educational goals by addressing both the academic and personal/social skills necessary for college success. It will cover topics such as listening, test taking, and study skills; substance abuse, diversity, financial management, and personal growth and development. Finally the course will acquaint students with the college's available services and resources that enhance students' success. Lecture 1 hour per week.

SDV 101 Orientation to Culinary Arts: Baking & Pastry (2 CR) Corequisite: HRI 128. Introduces students to the skills necessary to achieve their academic goals, services offered at the College, to the discipline in which they are enrolled, and to topics for students on academic probation. Covers topics such as services offered 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 2 hour per week.

SDV 101 Orientation to (Specify Discipline) (1 CR) Introduces students to the skills necessary to achieve their academic goals, services offered at the College, to the discipline in which they are enrolled, and to topics for students on academic probation. Covers topics such as services offered 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 1-3 hours per week.

SDV 106 Preparation for Employment (1 CR) Provides experience in resume writing, preparation of applications, letters of application, and successfully preparing for and completing the job interview. Assists students in identifying their marketable skills and aptitudes. Develops strategies for successful employment search. Assists students in understanding effective human relations techniques and communication skills in job search. Lecture 1 hour per week.

SDV 108 College Survival Skills (1 CR) 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 1 hour per week.

SOC – SOCIOLOGY

SOC 200 Principles of Sociology (3 CR) 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 215 Sociology of the Family (3 CR) 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 266 Race and Ethnicity (eff. Fall 2012) (3 CR) Investigates minorities such as racial and ethnic groups. Addresses social and economic conditions promoting prejudice, racism, discrimination, and segregation. Lecture 3 hours per week.

SOC 268 Social Problems (3 CR) 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.

SPA – SPANISH

SPA 101-102 Beginning Spanish I-II (4 CR, 4 CR) Prerequisite for SPA 102: SPA 101. Introduces understanding, speaking, reading, and writing skills and emphasizes basic Spanish sentence structure. Lecture 4 hours per week.

SPA 201-202 Intermediate Spanish I-II (3 CR, 3 CR) Prerequisites: For SPA 201, prerequisite is SPA 102. for SPA 202: SPA 201. Continues to develop understanding, speaking, reading, and writing skills. Spanish is spoken in the classroom. Lecture 3 hours per week.

TEL – TELECOMMUNICATIONS

TEL 150 Internetworking I (4 CR) Network Fundamentals introduces the functions of each layer of the ISO/OSI reference model, data link and network addresses, data encapsulation, different classes of IP addresses and subnetting and the functions of the TCP/IP network-layer protocols. This course is part of the Cisco Networking Academy™, and all changes are in keeping with the requirements of Cisco. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

TEL 151 Internetworking II (4 CR) Prerequisite: TEL 150. Routing Protocols and Concepts teaches features of the Cisco IOS software, including log in, context-sensitive help, command history and editing, loading software, configuring and verifying IP addresses, preparing the initial configuration of a router, and adding routing protocols to the router configuration. This course is part of the Cisco Networking Academy™, and all changes are in keeping with the requirements of Cisco. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

TEL 250 Internetworking III (4 CR) Prerequisite: TEL 151. LAN Switching and Wireless studies the advantages of LAN segmentation using bridges, routers, and switches, Fast Ethernet configuring access lists; Spanning Tree Protocol; and Virtual LANs. This course is part of the Cisco Networking Academy™, and all changes are in keeping with the requirements of Cisco. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

TEL 251 Internetworking IV (4 CR) Prerequisite: TEL 250. Accessing the WAN focuses on the differences between the following WAN services: LAPB, Frame Relay, ISDN/LAP, HDLC, PPP, and DDR. This course is part of the Cisco Networking Academy™, and all changes are in keeping with the requirements of Cisco. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

VEN – VITICULTURE AND ENOLOGY

VEN 100 Introduction to Viticulture (3 CR) Introduces grapes, their history, distribution, classification, and areas of production. Provides an overview of grape uses and products made from them. Includes site selection and environmental factors that affect grapes and their quality. Lecture 3 hours per week.

VEN 110 Vineyard Establishment (3 CR) Reviews sites, soils, and other factors that affect the planting of grapes. Covers vineyard designs, varieties, and the training of newly planted vines. Includes weed control and pest management of new vines. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

VEN 125 Vineyard Management (3 CR) Prerequisite: VEN 121 or divisional approval. Studies the overall practices involved in vineyard management with emphasis on diseases and insects as they affect overall quality of grapes. Surveys grape harvest and grape maturity as it affects wine quality. Provides hands-on experience in the harvest process. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

WEL – WELDING

WEL 120 Introduction to Welding (3 CR) 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 2 hours. Laboratory 2 hours. Total 4 hours per week.

WEL 121 Arc Welding (2 CR) Prerequisite: WEL 120 or divisional approval. Studies the operation of AC and DC power sources, weld heat, polarities and electrodes for use in joining various alloys by the SMAW process. Covers welds in different types of joints and different welding positions. Emphasizes safety procedures. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

WEL 130 Inert Gas Welding (3 CR) Prerequisite: WEL 120 or divisional approval. 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 3 hours. Total 5 hours per week.

WEL 135 Inert Gas Welding (2 CR) Prerequisite: WEL 120 or divisional approval. Introduces practical operations in use of inert gas shielded arc welding. Studies equipment operation, setup, safety, and practice of GMAW (MIG) and GTAW (TIG). Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

WEL 145 Welding Metallurgy (3 CR) Studies steel classifications, heat treatment procedures, properties of ferrous and non-ferrous metals. Discusses techniques and practices of testing welded joints and destructive/ nondestructive, visual magnetic, and fluorescent testing. Lecture 3 hours per week.

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Midlothian

- Nov. 18-19, 2014
Annual Meeting
- Nov. 19-20, 2014
- Jan. 28-29, 2015
- March 18-19, 2015

- May 20-21, 2015

Board Docs

Board Agenda Management System

- July 16-17, 2014 - See BoardDocs »

- Minutes and agendas are now located as part of the BoardDocs system. »

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VIRGINIA WESTERN :: ABOUT VWCC :: PRESIDENT'S OFFICE

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2014-2015 LOCAL ADVISORY BOARD MEETING SCHEDULE

Meetings will be held on campus as a working lunch in the Natural Science Center at 11:30AM unless noted otherwise.

- July 17, 2014 - **cancelled**
- September 18, 2014
- November 18-19, 2014 - **Annual State Board Meeting** (optional)
- January 15, 2015
- March 19, 2015
- May 21, 2015

LOCAL ADVISORY BOARD MEETING MINUTES

All files are in PDF format.

- [March 2014 Minutes](#)
- [January 2014 Minutes](#)
- [September 2013 Minutes](#)
- [May 2013 Minutes](#)
- [March 2013 Minutes](#)
- [January 2013 Minutes](#)
- [September 2012 Minutes](#)
- [May 2012 Minutes](#)
- [March 2012 Minutes](#)
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- [May 2011 Minutes](#)
- [March 2011 Minutes](#)
- [January 2011 Minutes](#)
- [September 2010 Minutes](#)
- [May 2010 Minutes](#)

- [March 2010 Minutes](#)
- [January 2010 Minutes](#)

OTHER IMPORTANT INFORMATION

[VCCS State Board Membership \(http://www.vccs.edu/about/where-we-are/state-board/\)](http://www.vccs.edu/about/where-we-are/state-board/)



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- **William H. Fralin, Jr.**
- **John R. Francis, Jr.**
- **Stanard F. Lanford**
- **Barbara B. Lemon**
- **Elizabeth W. Payne, Ed.D.**
- **Donald G. Smith**
- **John B. Williamson, III**

ACCOUNTING CURRICULUM ADVISORY COMMITTEE

2014

Chris Bacco
Assistant Controller
Luna Innovations Incorporated

Suzy Lawrence
Director of Accounting
Carilion Clinic

Aaron Chase
Staff Accountant
Luna Innovations Incorporated

Richard B. Lester
Accounting Supervisor/Assistant Controller
Steel Dynamics, Inc.


Melinda T. Chitwood
Partner
Brown, Edwards & Company, L.L.P.

Harry Schwarz
Partner
Dixon, Hughes, Goodman, L.L.P.

APPROVED:



Vice President of Academic & Student Affairs Date



Chair, College Board Date

11/01/13

ADMINISTRATION OF JUSTICE
CURRICULUM ADVISORY COMMITTEE

2014

Howard Hall
Chief of Police
Roanoke County Police Department

Craig Harris
Chief of Police
Virginia Western Community College

Ms. Diane V. Brogan
Sociology & Criminal Justice
Roanoke College

The Honorable Jacqueline F. Ward Talevi
Chief Judge
City of Salem General District Court

Ben Cook
Chief of Police
Vinton Police Department

Michael G. Winston
Sheriff
Roanoke County Sheriff's Office

Lt. Mac Babb
Director Police Academy
Roanoke City Police Department

Jeff Dudley
Chief of Police
Salem Police Department

Chris Perkins
Chief of Police
Roanoke City Police Chief

Thomas Fleming
Senior Resident Agent
U. S. Secret Service

Christopher Strom
Consultant
Intel Investigations, llc

APPROVED:

Erin D. Delmer 12/16/13
Vice President of Academic & Student Affairs Date

Forest S. Jones 1/16/14
Chair, College Board Date

ADMINISTRATIVE MANAGEMENT TECHNOLOGY
HEALTH INFORMATION MANAGEMENT
CURRICULUM ADVISORY COMMITTEE

2014

Tara Alatorre
Project Director/Career Transition Coach
Credentials to Career
Virginia Western Community College

Kristen Arthur, MBA, PHR
Practice Manager
General and Pediatric Surgery
Carilion Clinic

Dr. Kathryn H. Beard
Coordinator, Dual Enrollment
Virginia Western Community College

Laura M. Lee
VWCC Adjunct Instructor
Health Information Management

Robert "Bob" E. Lee, Jr.
Assistant Administrator
Physicians to Children

Mark Jones
Coordinator, Career & Technical Education
Roanoke County Schools

Nita Wilhelm, CCS, CPC-H
Director, Health Information Management
Facility Privacy Official
Lewis-Gale Medical Center

APPROVED:

Elizabeth Wilmes 12/16/13
Vice President of Academic & Student Affairs Date

Forest J. Jones 1/16/14
Chair, College Board Date

ARCHITECTURAL/CIVIL ENGINEERING TECHNOLOGY
CURRICULUM ADVISORY COMMITTEE

2014

Adam Cohen
President
Structures Design/Build, LLC

Donald Pritchard
Vice President
SFCS, Inc.

Sherry F. Crickenberger
Architectural Designer
VWCC Adjunct Instructor


Troy J. Smith, President
Avis Construction Co., Inc.

Byron Dickson
President
Dickson Architects & Associates

Bradley D. Townsend
Structural Engineer
AECOM

John Garland
Principal/President
Spectrum Design, P.C.

APPROVED:



Vice President of Academic & Student Affairs Date



Chair, College Board Date

AUTOMOTIVE ANALYSIS AND REPAIR
CURRICULUM ADVISORY COMMITTEE
2014

Danny Bass, Owner
Bass Transmissions & Automotive Repair

Carlton Mabe, Trainer & Instructor I
Virginia Western Community College

Drew Daniels
Services & Parts Director
Dominion Dodge


Scott Shrewsbury, Service Manager
Mike Sisca, Shop Foreman
Magic City Ford

Richard Durrett
Automotive Instructor
Roanoke City Technical Education Center

Wendell Timothy Wray, Master Technician
VWCC Adjunct Instructor &
Berglund Ford

Steven P. Hoback
VWCC Adjunct Instructor &
Automotive Instructor
Roanoke County Public Schools

APPROVED:


Vice President of Academic & Student Affairs 12/16/13
Date


Chair, College Board 1/16/14
Date

BUSINESS/MANAGEMENT
CURRICULUM ADVISORY COMMITTEE

2014

Emily Brock
Ph.D. Candidates, Public Finance, Va. Tech
Research Fellow, Social Science Research
Council, and Adjunct Instructor, Virginia
Western Community College

Lynda McNutt Foster
Vice President
Voltage Leadership Consulting

Richard Harris, Jr.
Plant Manager
Info Seal


Cary Hunley
Operations Manager
Lowe's, Inc.

Joseph J. Sgroi
Director of Human Resources
Roanoke County


Todd Wampler
Owner/Broker
Wampler Realty

Joyce Waugh, CECD
President & CEO
Roanoke Regional Chamber of Commerce

APPROVED:



Vice President of Academic & Student Affairs Date



Chair, College Board Date

COMMUNICATION DESIGN
CURRICULUM ADVISORY COMMITTEE


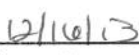
2014

Susan Roberts Gordon
Graphics Manager
Magnets USA®



Chris McAdams
Neathawk, Dubuque & Packett

Tony Pearman
Access

APPROVED:

Vice President of Academic & Student Affairs Date

Chair, College Board Date

CULINARY ARTS
CURRICULUM ADVISORY COMMITTEE

2014

Beverly Allman
Executive Board, SW Virginia Chapter
American Culinary Federation,
Program Coordinator of ACF Chef & Child

Katie Camper
CEO/President
KB2 Marketing

Ruth Cassell
Alumni & Development Services
Coordinator
Virginia Western Community College, Office
of Institutional Advancement

Becky Ellis
Senior Director
Carilion Clinic

Cynthia Lawrence
President
PerformanceLink

Roger Light
Executive Chef
The Shenandoah Club

Alex Slates (student)
Teppanyaki Chef
Kabuki Japanese Steakhouse & Sushi

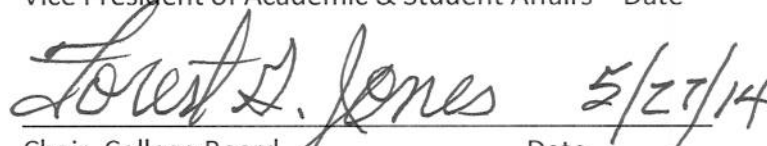
Lisa B. Soltis
Economic Development Specialist
City of Roanoke

Charles L. Williams
Partner
Gentry, Locke, Rakes & Moore, LLP

APPROVED:



Vice President of Academic & Student Affairs Date



Chair, College Board Date

VWCC DENTAL HYGIENE
CURRICULUM ADVISORY COMMITTEE

2014

Amanda Beheler, R.D.H.
Roanoke, VA

Linda Meador, R.D.H.
Roanoke, VA

Charles E. Conklin, D.D.S.
Director of Dental Services
Carilion Clinic

R. Douglas Ross, D.D.S.
Roanoke, VA

Paula Derbyshire, R.D.H.
Virginia Western Community College

Leslie Spira, R.D.H.
Carilion Clinic

Marie Gibbs, R.D.H.
Veterans Administration Medical Center

Martha Sullivan, R.D.H., M.S.H.A.
Dental Hygiene Program Head
Virginia Western Community College

Colleen Hailey, R.D.H.
Virginia Western Community College

Becky Tinsley, R.D.H.
Roanoke, VA

Heather Harris, R.D.H.
Virginia Western Community College

Lynn Triplett, R.D.H.
Roanoke, VA


Richard Joachim, D.D.S.
Blue Ridge, VA

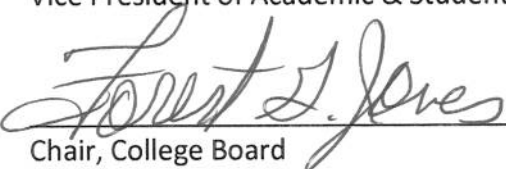
Greg Wright, D.D.S.
Roanoke, VA

*Angela Barker
Student Representative

*Student Representative Appointed Annually

APPROVED:


Vice President of Academic & Student Affairs 12/16/13 Date


Chair, College Board 1/16/14 Date

VWCC-DCC JOINT VENTURE
DENTAL HYGIENE CURRICULUM ADVISORY COMMITTEE

2014

Michelle Bernard, Coordinator
George Washington High School
Dental Assisting Program (Danville)

Paul Fox, Ph.D.
Dean of Arts and Sciences
Danville Community College

Pat Gobble, R.D.H.
Danville, VA

F.T. Grogran, III, D.D.S.
Danville, VA

Greg D. Howard, D.D.S.
Danville, VA

Robin Jennings, R.D.H.
South Boston, VA

Jesse Wall, D.D.S.
Danville, VA

Jim Muehleck, D.D.S.
Martinsville, VA

Cathy Rutledge, R.D.H.
Danville, VA

Martha Sullivan, R.D.H., M.S.H.A.
Dental Hygiene Program Head
Virginia Western Community College


Lynn Turner, R.D.H.
Site Coordinator
Danville Community College

*Bridgette Fulcher
Student Representative

*Student Representative Appointed Annually

APPROVED:


Vice President of Academic & Student Affairs Date 12/16/13


Chair, College Board Date 1/16/14

VWCC-LFCC JOINT VENTURE
DENTAL HYGIENE CURRICULUM ADVISORY COMMITTEE

2014

Mostafu Aboulkhair, D.D.S.
Luray Dental Clinic
Haymarket, VA

Michelle B. Blitch, R.D.H.
Winchester, VA

Clark Fortney, D.D.S.
Stephenson, VA

Linda Gill
Site Coordinator
Lord Fairfax Community College

Lori L. Gochenour, D.D.S.
Hagerstown, MD

Jill B. Grassmick, R.D.H.
Luray, VA

Thomas Gromling, D.D.S.
Stephens City, VA

Ben Hanson, D.D.S.
Winchester, VA

Sonja H. Haynes, R.D.H.
Middletown, VA

Polly Hoveter, R.D.H.
Front Royal, VA

Fabiola Hutchins, R.D.H.
Winchester, VA

Pamela Johnson, R.D.H.
Winchester, VA

Kathleen Kanter, R.D.H.
Middletown, VA

Pamuela A. Kitner, R.D.H.
Fort Valley, VA

Cindy J. Knotts, D.D.S.
Winchester, VA

Karen J. McIntyre, R.D.H.
Front Royal, VA

Lynne Stovall R.D.H.
Bentonville, VA


Martha Sullivan, R.D.H., M.S.H.A.
Program Head of Dental Hygiene
Virginia Western Community College

Mark Zemanovich, D.D.S.
Stephens City, VA


*Laura Farris
Student Representative

*Student Representative Appointed Annually

APPROVED:



Vice President of Academic & Student Affairs Date



Chair, College Board Date

11/01/13

EARLY CHILDHOOD DEVELOPMENT
CURRICULUM ADVISORY COMMITTEE

2014

Linda Roth
Director
The Community School

Kris Meyers
Program Manager
Smart Beginnings of Greater Roanoke

Selena Childress
Director
TAP Head Start

Tana Adams
Director
Bonsack Baptist Weekday Early Education
Center

Maria Ferrone
Director of Operations
Honey Tree Early Learning Centers

Sharon Sheppard
Preschool Program Coordinator
Roanoke County Schools


Dr. Jaye Harvey
Coordinator
Virginia Cross Sector Professional
Development Group in Early Childhood
Development

Ramona Wray
Supervisor of Education, Head Start
TAP Head Start

Dr. Kathy Hoover
Radford University
College of Education & Human
Development

Leah Wechtaluk McFarren
Valarie Angle
Infant and Toddler Specialists, Piedmont
Region – Virginia Western Community
College

APPROVED:



Vice President of Academic & Student Affairs Date 12/16/13



Chair, College Board Date 1/16/14

ELECTRICAL ENGINEERING TECHNOLOGY AND
MECHANICAL ENGINEERING TECHNOLOGY
CURRICULUM ADVISORY COMMITTEE

2014

Bonnie Allen, Vice President
Customer Operations
Keltech Electronics

Chuck Flynn
Production Director
The Roanoke Times

Dawn Boone
Engineering Technician
Plastics One, Inc.

Dennis Frye
Director of Instructional Tech. & Media
Rockingham County Schools

Bob Dickerson
Engineering Manager
Mersen

Dan Johnson
Electronics Instructor
Franklin County High School

Lynn Draper
Controller
Keltech Electronics

James Perdue
Product Line Manager
Network and Service Enablement
JDSU LLC

APPROVED:

Erin O. Wilner 12/19/13
Vice President of Academic & Student Affairs Date

Forest S. Jones 1/16/14
Chair, College Board Date

ENERGY MANAGEMENT SYSTEMS
CURRICULUM ADVISORY COMMITTEE

2014

Adam Cohen, LEED AP
President
Structures Design/Build, LLC

Mark Slone
High Performance Building Specialist
Trane

John A. Garland, PE
President/Principal
Spectrum Design


Randy Ughetta
President
Applied Solar Energy Technologies

Patrick Murdock, LEED AP
Account Manager
Trane

Dick Willis
Vice President of Engineering
SoftSolutions, Inc.

Georg Reichard
Associate Professor
Virginia Tech

APPROVED:



Vice President of Academic & Student Affairs Date



Chair, College Board Date

EXERCISE SCIENCE AND PERSONAL TRAINING
CURRICULUM ADVISORY COMMITTEE

2014

Barbara Wright
Health/PED Program Head
Associate Professor
VWCC Faculty

Jane Seymour
Instructor, Gold's Gym
VWCC Adjunct Faculty

Karen Carpenter
Assistant Professor
Health/PED
VWCC Faculty

Shawn Best
VWCC Adjunct Faculty

Annette Ireland
VWCC Adjunct Faculty

Marilyn Herbert-Ashton
Director of Grants Development & Special
Projects
Virginia Western Community College

Nancy Greene
Wellness Director
Salem Family YMCA

Betty Bennett
Fitness Director
Gold's Gym

APPROVED:

Erinabel Wiener 12/16/13
Vice President of Academic & Student Affairs Date

Lorent J. Jones 1/16/14
Chair, College Board Date

11/01/2013

GEOGRAPHIC INFORMATION SYSTEMS
CURRICULUM ADVISORY COMMITTEE

2014

Thomas Furcron
GIS Manager
Roanoke Gas Company

Matt Miller
Director of Information Services
Roanoke Valley-Alleghany Regional Commission

Charles Grant
GIS Analyst
Engineering Department, Salem

Michael Nichols
Assistant Director, Information Technology
R & K Solutions, Inc.

Tracey Leet
GIS Project Manager
City of Roanoke

Shane Sawyer
Regional Planner III
Roanoke Valley-Alleghany Regional Commission

John McGee, Associate Professor
Virginia Geospatial Extension Specialist
Virginia View Coordinator
Department of Forest Resources and
Environmental Conservation

APPROVED:

Elizabeth Wilmer 12/16/13
Vice President of Academic & Student Affairs Date

Forest S. Jones 1/16/14
Chair, College Board Date

11/01/2013

HORTICULTURE TECHNOLOGY
CURRICULUM ADVISORY COMMITTEE

2014

Mike Anderson
Owner
Varsity Landscaping and Grounds, Inc.

Bill Garren
Owner
Green Acres, Inc.

Marilyn Arbogast
Horticulturist
City of Roanoke

Fredric Gray
Owner
Gray's Nursery

Randy Brannon
Owner
Roanoke Landscapes, Inc.

Melissa Hodgkinson
Landscape Architect, Owner
Fiddlehead Landscape & Design

Barbara Kolb
Owner
Blue Ridge Vineyards

APPROVED:

Erinabel Williams 12/10/13
Vice President of Academic & Student Affairs Date

Forest J. Jones 1/16/14
Chair, College Board Date

HUMAN SERVICES
CURRICULUM ADVISORY COMMITTEE

2014

Theresa Trent
Coordinator, Social Work Program
Radford University/Higher Education Center

Stevi Phillips or Ashley Carle
EHS Support Services

Robin Hubert
On Our Own of Roanoke Valley, Inc.

Jean Craddock or Nancy Patterson
Brandon Oaks Nursing Home

Tom MacMichael
Presbyterian Community Center/Pathways
Program

Jenny Neel
Bethany Hall

Kem Smith
Blue Ridge Behavioral Healthcare

Eulah Price
Academic Outreach Director
Radford University/Higher Education Center

Sherri Songer
The Turning Point/Salvation Army

APPROVED:

Elizabeth Wilmer 12/16/13
Vice President of Academic & Student Affairs Date

Forest J. Jones 1/16/14
Chair, College Board Date

HVAC (HEATING, VENTILATION, AIR CONDITIONING)
CURRICULUM ADVISORY COMMITTEE

2014

Terry Kendrick
Territory Manager
Virginia Air Distributors

Jason M. Price, Manager
Mechanical Division
IES


Marvin Lloyd
Owner
Mechanical Services LLC

Dan Reynolds
District Service Solutions Manager
Virginia Trane

Tracy Moore
Technical Service Advisor
Southern Refrigeration Corporation


Mark Shepherd
Purchasing Manager
Southern Refrigeration Corporation

APPROVED:



Vice President of Academic & Student Affairs Date

12/16/13



Chair, College Board Date

1/16/14

INFORMATION SYSTEMS TECHNOLOGY
CURRICULUM ADVISORY COMMITTEE

2014

Art Carter, Ph.D., Chair
Department Information Technology
Radford University

Christopher Fury
Senior Software Engineer
Synchrony, Inc.


Carlton Carter
Database Administrator II
Carilion Services, Inc.

Jason Garland
UNIX Administrator
Carilion Clinic Technology Services Group


Kathy D. Cox
Assistant Director of Technology
City of Roanoke

Paul Moore, Vice President
Information Systems and Services
Shenandoah Life Insurance Company

APPROVED:



Vice President of Academic & Student Affairs Date



Chair, College Board Date

INTEGRATED ENVIRONMENTAL STUDIES SPECIALIZATION
CURRICULUM ADVISORY COMMITTEE

2014

Mr. Shane Sawyer
Regional Planner
Roanoke Valley Alleghany Regional
Commission

Dr. Jeffrey Gillette
Professor, Biology
Virginia Western Community College

Mr. Scott Shirley
Director of Wastewater Operations
Western Virginia Water Authority

Dr. John Anderson
Dean of STEM
Virginia Western Community College


Ms. Lanette Upshaw
Assistant Professor, Chemistry
Virginia Western Community College

Dr. Antoinette Pepin
Associate Professor, Biology
Virginia Western Community College

Ms. Amy White
Assistant Professor and Program Head
Biology Department
Virginia Western Community College

Renee Godard
Professor of Biology
Hollins University

APPROVED:



Vice President of Academic & Student Affairs Date



Chair, College Board Date

MOTORCYCLE
CURRICULUM ADVISORY COMMITTEE

2014

Bruce Biondo, Manager
Motorcycle Program
Department of Motor Vehicles

Roger Hamner
Instructor
Motorcycle Safety Program

Kristin Cawley
Instructor
Motorcycle Safety Program

Carlton Mabe, Coordinator
Motorcycle Safety Program
Virginia Western Community College

Jeff Dillon
Business Manager
Star City Power Sports

APPROVED:

Elizabeth Wilkins 12/16/13
Vice President of Academic & Student Affairs Date

Forest L. Jones 1/16/14
Chair, College Board Date

NURSING
CURRICULUM ADVISORY COMMITTEE

2014

Dr. Anthony R. Ramsey, Ph.D., FNP, RN
Director of School of Nursing
Radford University

Cynthia Cunningham,
Director Clinical Simulation Center
Radford University

Dr. Melody Sharp, DNP, RN
Director Post-licensure and Accelerated BSN Programs
Jefferson College of Health Sciences

Stimis Smith, MBA, BSN, RN, CRRN
Director of Inpatient Rehab (CRCH)
Carillion Clinic

Carolyn Webster,
Vice President of Nursing Operations
Carillion Health Systems

Melissa W. Ferguson,
Student Service Advisor
Carillion Clinic - Visiting Student Affairs

Lauren B. Crowder
Student Service Advisor
Carillion Clinic - Visiting Student Affairs

Leigh Frazier
Director of Clinical Services
Lewis Gale Behavioral Health

Jamie Pruitt
Assistant Program Director
Lewis Gale Behavioral Health

Charlotte Tyson
Chief Nurse Executive
Lewis Gale Medical Center

Sherry Stone,
Education Specialist
Lewis Gale Medical Center

Amy Akers
Department Director, 6 East
Lewis Gale Medical Center

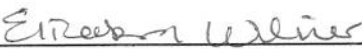
Sharon Leftwich
Staff Education Nurse
Richfield Retirement Community

Susan Underwood
Nursing Services Manager
Richfield Retirement Community


VWCC Employees

Anne Prucha, Program Head, A.A.S. Nursing Program
Krystle Forelines, A.A.S. Nursing Faculty
Cathy Hiler, A.A.S. Nursing Faculty
Paula Tate, A.A.S. Instructor
Diane Williams, A.A.S. Nursing Faculty
Pam Woody, Information Specialist
Math, Science & Health Professions

APPROVED:



Vice President of Academic & Student Affairs Date



Chair, College Board Date

PARALEGAL STUDIES
CURRICULUM ADVISORY COMMITTEE

2014

Francis H. "Chip" Casola, Esquire
Principal
Woods Rogers PLC

Heather Hale
Paralegal
Woods Rogers PLC

Roy V. Creasy, Esquire
Roanoke, VA

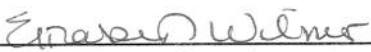
Linda S. Kirkwood
Paralegal
Ferris & Eakin, PC

Charles L. Downs, Jr., Esquire
Partner
LeClairRyan

Steven Wilder
Adjunct Instructor, Paralegal
Virginia Western Community College

Scott R. Geddes, Esquire
Osterhoudt, Prillaman, Natt, Helscher, Yost,
Maxwell & Ferguson, PLC

APPROVED:

 12/14/13

Vice President of Academic & Student Affairs Date

 1/16/14

Chair, College Board Date

PHLEBOTOMY
CURRICULUM ADVISORY COMMITTEE


2014

Lakricia Duncan
Director of Technical Operations
Solstas Lab Partners
Roanoke Memorial Hospital


Pamela Brown
Chief Supervisor of Phlebotomy
Solstas Lab Partners
Roanoke Memorial Hospital

Hannah Martin
Supervisor of Phlebotomy
Solstas Lab Partners
Roanoke Memorial Hospital

APPROVED:



Vice President of Academic & Student Affairs Date 12/16/13



Chair, College Board Date 1/16/13

PRACTICAL NURSING
CURRICULUM ADVISORY COMMITTEE

2014

VACANT

Director of Nursing
Richfield Retirement Community

Jennifer Lytle, R.N.
Director of Nursing
Virginia Veterans Care Center

Martha Cousier
Human Resources Manager
Berkshire Health and Rehabilitation Center

Melissa Ferguson
Student Services Advisor
Carilion Clinic

Amy Arthur, RN
Director of Education
Berkshire Health and Rehabilitation Center


Janet Smith, R.N.
Staff Development
Berkshire Health & Rehabilitation

Melanie Ham, RN, CNS-BC, CSAC
Director Staff Development and Training
Catawba Hospital


Brenda Divers-Wiley, RN/BSN/MA-Ed
Director of Education/Medical Library
Lewis-Gale Medical Center

Carol Schaller, RN
Nurse Recruiter
Friendship Retirement Community

APPROVED:



Vice President of Academic & Student Affairs Date 12/16/13



Chair, College Board Date 1/16/14

RADIATION ONCOLOGY
CURRICULUM ADVISORY COMMITTEE

2014

Freda T. Carson, RT (R) (T)
Director, Radiation Oncology
Centra Health System
Alan B. Pearson Cancer Center

Matilda Conner, MS, RT (R) (T)
Team Leader
Carilion Clinic Cancer Center

Michael Compton, CMD, RT (R) (T)
Director, Radiation Oncology
Memorial Hospital of Martinsville
& Henry County

Carole S. Graham, MS, RT (R) (T)
Program Head, Radiation Oncology
Virginia Western Community College

Brenda Greenway, BS, RT (R) (T)
Clinical Coordinator, Radiation Oncology
Virginia Western Community College


Robert C. Heath, MD
Radiation Oncologist
Carilion Clinic Cancer Center


Marsha Myers, M.B.A., CMD, RT (R) (T)
Director, Radiation Oncology
Lewis Gale Hospital at Pulaski

Scott Myers, M.B.A., CMD, RT (R) (T)
Director, Radiation Oncology
Lewis-Gale Regional Cancer Center

Joseph L. Surace, MS
Radiation Physics
Carilion Clinic Cancer Center

APPROVED:

 12/16/13
Vice President of Academic & Student Affairs Date

 1/16/14
Chair, College Board Date

RADIOGRAPHY
CURRICULUM ADVISORY COMMITTEE

2014

Lee Anthony, Ph.D.
Physics Associates

Jeff Rakes, B.S., RT(R)
Physics Associates

Paige I. Collins, B.B.A., RT(R)
Diagnostic-Quality Management
Veterans Administration Medical Center

Michael Stoots, M.Ed., RT(R)(N)CRA
Director, Diagnostic Imaging Services
Lewis-Gale Medical Center

Donna Donithan, A.A.S., RT(R)
Chief Technologist
Radiology Service (114)
Veterans Administration Medical Center

Sharon Whetzel, RT(R)(N)
Director, Diagnostic Imaging
Carilion Clinic

Sonya Ranson Echols, Ph.D.
Director, Center for Experiential Learning
Carilion Clinic

Carla Wiley, B.S., RT(R)
Assistant Director of Diagnostic Imaging
Diagnostic Imaging Services
Lewis-Gale Medical Center

Andrea Flora, B.S., RT(R)(N)(M)
Manager of Imaging Services
Carilion Riverside 3

VWCC Employees

Mary B. Loritsch, Ed.D, RT(R), FASRT
Program Director, Radiography

Carole Graham, MS.Ed, RT(R)(T)

Program Director, Radiation Oncology

Susan Haynes, M.Ed., RT(R)

Radiography Program, Clinical Coordinator

Pam Woody, M.S.


Health Technology Student Info Specialist

Deborah Sampson, MS.Ed, RT(R)(CT)(MR)

Adjunct Professor, CT and MR

Lisa Mayo, RT(R)
Lead Technologist
Carilion Crystal Spring Imaging

APPROVED:



Vice President of Academic & Student Affairs Date

12/16/13



Chair, College Board Date

1/16/14

TECHNICAL STUDIES A.A.S. MECHATRONICS TECHNOLOGY
CURRICULUM ADVISORY COMMITTEE

2014

Gary Calleo
Vice-President of Manufacturing
R. R. Donnelly

Steve Heckman
Senior Manufacturing Engineer
Plastics One, Inc.

Jon Casto
Director of Logistics Engineering
Elizabeth Arden

Chip Lamb
Technical Assistant Manager
Dynax

Melinda Cox,
Manager of Existing Business Programs
Roanoke Co Dept of Economic Development

Mack McGhee
Chief Operating Officer
Sunapsys, Inc.

Jim Dahlgren
Project Coordinator
Elizabeth Arden

Wayne Michie
Consultant

Mike Dudding, Vice-President
Engineering & Manufacturing
Gala Industries

Joe Ogle
Manager Manufacturing Engineering
Plastics One, Inc.

John Dyer
Vice-President Manufacturing
Optical Cable Corporation

Hank Simpson
Senior Mgr Manufacturing & RND
Engineering
John C. Nordt Company

Jason Suhr
Principal
Burton Center for Arts & Technology

APPROVED:

Elizabeth Wilmer 12/16/13
Vice President of Academic & Student Affairs Date

Forest L. Jones 1/16/14
Chair, College Board Date

11/01/13

WATER AND WASTEWATER TECHNOLOGY
CURRICULUM ADVISORY COMMITTEE

2014

Robert Canova
Retired, AECOM Engineer

James "Scott" Agner
Special Projects Manager
Western Virginia Water Authority

Ronald "Ron" Connor
Retired, Virginia Department of Health


Gerard "Jerry" Higgins
Manager
Blacksburg-Christiansburg-VPI Water Authority

Lawrence E. "Mac" McCutchan
Superintendent
Peppers Ferry Regional Wastewater Treatment
Plant


James V. Morris
Water Operations Manager
Western Virginia Water Authority

Gary Robertson
Executive Manager of Water Operations
Western Virginia Water Authority

APPROVED:



Vice President of Academic & Student Affairs Date 12/14/13



Chair, College Board Date 1/16/14

11/01/13

WELDING
CURRICULUM ADVISORY COMMITTEE

2014

Robert Fitch
Welding Technical Representative
ARCET

Randall Sink
Welding Adjunct Instructor, VWCC

Steven Fultz
Welding Instructor, Roanoke City
Public Schools

Dave Trivett
Sales Associate
ACE Steel

Carlton Mabe
Educational Program Specialist
VWCC

Gary Young
Program Head, HVAC and Welding Instructor
VWCC

APPROVED:

Ernest Wilmer 12/10/13
Vice President of Academic & Student Affairs Date

Forest J. Jones 4/16/14
Chair, College Board Date

11/01/13