

Rosman High School

Course Description Guide for:

2015-2016

Rosman High School
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Course and Career
Planning Guide



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Introduction

The educational programs offered in Transylvania County Schools and the requirements for a North Carolina Diploma are described in this booklet. The information is designed to assist students and their families in making education plans. Whether the student's goal is to prepare for continuing education in college or technical school or to prepare for employment upon graduation from high school, careful thought should be given to the courses that are taken each year.

Rosman High School Registration Process 2015-2016

High school coursework should be planned to provide sound basic preparation for career goals and higher education requirements. Career and educational goals often change; therefore, coursework must be annually reviewed and adjusted. Information in this booklet will help assist in the process of designing the student's course of study. **It should be noted due to course demand and the maximum number of sections available to teach that courses listed in this handbook might not be available.**

Following is a description of the registration process for Rosman High School. Parents and guardians are encouraged to be aware of the process to support students in making proper career pathway decisions. Great time and effort is made by the staff of Rosman High School to make the best educational decisions for student's high school and possible college careers. Ultimately, the goals and direction for a student must belong to the student and their family. Therefore we encourage any specific questions about the registration process should be directed to the Guidance Office or Administration at Rosman High School.

Registration for current 9th – 11th graders will take place in early March. Time will be provided during the school day for registration activities. In addition, an information session for all rising ninth graders and their parents will be held in the Rosman High School media center on **March 3rd at 6 pm**. Students and parents may ask specific questions about courses, course of study, and other issues related to registration.

March 2nd: Registration meetings for students w/ BRCC

(In Auditorium times are estimated)

Rising Seniors- 8:05am

Rising Juniors- 10:00am

Rising Sophomores- 11:15am

March 3rd at 6pm: Parent registration meeting in the Media Center with Mr. Weaver

March 4th - March 6th: Rising Freshmen registration meetings during tiger times

March 9th - 13th: Registration in Media Center (Rising 12th-10th grades)

March 16th-19th: Registration in Middle School (Rising 9th grade)

Each 9th grade student will develop a Four-Year Plan that outlines the possible sequencing of courses. Rising tenth, eleventh, and twelfth graders will review and update their Four-Year Plan with their academic advisor during the registration process each year. Students will meet with their advisor during scheduled advisement times. During this time students will review and make any necessary changes to their Four-Year Plan. After Four-Year Plans have been reviewed by students, copies of course selections will be printed and distributed to students for parents to review. Scheduling should be completed by the end of May. A Four-Year Plan template can be found in the back of this guide.

Requirements for Graduation

Minimum course credits required for high school graduation in Transylvania County are twenty-eight credits or four less than the maximum number of courses the student can take. He/she must complete a course of study.

REQUIREMENTS FOR GRADUATION:

- Must complete ALL requirements for a particular course of study
- Must pass (perform at a Level III or better) on all End-of-Course Tests (EOCs). EOCs are required in English I 0, Math I, and Biology.
- Must take any NC Final Exam (English, Math, Science, Social Studies).
- Must take any CTE Post-Assessment (VoCats) wherever required when attached to a Career-Technical Education course.
- Students must take the PLAN in the 10th grade, the ACT in the 11th grade, and WorkKeys in the 12th grade.
- Students entering high school for the first time in the fall of 2012 are required to pass American History I and II.
- Must successfully complete a senior project

All Transylvania County students are encouraged to take courses in fine arts, foreign language, career and technical education, and areas of academic interest to complete their courses of study.

The following are descriptions of each program of study (see table on following page):

Core Curriculum:

Starting with the freshman class of 2009, students will need to complete the Core Curriculum courses in order to graduate. This curriculum differs from past standards by requiring four math credits and four courses in an elective Concentration Area. Please see the table of graduation requirements for a complete list of requirements. These requirements do not apply to students completing the Occupational Course of Study or special education certificate.

Transylvania County Scholar:

This program of study allows a student to complete all future-ready core requirements and work well beyond grade level to explore the complexities of subject areas beyond the regular college preparatory program. This student must meet all requirements set forth by Transylvania County Schools found on the following pages.

North Carolina Scholar:

This program of study allows a student to complete all future-ready core requirements and work beyond state requirements. This student must meet all requirements set forth by the North Carolina Scholars program found on the following pages.

Diplomas and Other Completion Certificates

The document received upon completion of a program depends upon several factors. The various exit documents are described below.

Graduation Certificate or Certificate of Completion: Students who do not meet the standards for a course of study but satisfy all state and local graduation requirements may be eligible to receive a certificate of achievement or graduation certificate.

Diploma: Students who satisfy all state graduation requirements, including a defined and completed course of study.

Content Area	Core Curriculum	TC Scholar	NC Scholar
ENGLISH	4 Credits (9, 10, 11, 12)	4 Credits (9,10, 11, 12)	4 Credits (9, 10, 11, 12)
MATH	4 Credits (Math I, Math II, Math III) AND 1 higher level math OR substitution track approved by the principal.	4 Credits (Math I, Math II, Math III, and 1 higher level math course)	4 Credits (Math I, Math II, Math III, and 1 higher level math course)
SCIENCE	3 Credits (Earth/Environmental, Biology, and a Physical Science course)	4 Credits (Earth/Environmental, Biology, 2 upper level courses-which one must be Chemistry or Physics)	3 Credits (Earth/Environmental Biology, Chemistry or Physics)
SOCIAL STUDIES	4 Credits (World History, Civics/Economics, American History I & II)	4 Credits (World History, Civics/Economics, American History I & II OR **AP US History) * A minimum of one course must be honors or higher in this sequence. **An additional social studies course must be completed to meet the four credit requirement.	4 Credits (World History, Civics/Economics, American History I & II)
FOREIGN LANGUAGE	Not required but HIGHLY recommended. See ELECTIVES	2 Credits in the SAME foreign language	2 Credits in the SAME foreign language
HEALTH & PHYSICAL EDUCATION	1 Credit Health/PE	1 Credit Health/PE	1 Credit Health/PE
CAREER/CTE	Not required but HIGHLY recommended. See ELECTIVES	1 Credit	See Electives
ARTS EDUCATION (VISUAL ART, MUSIC, THEATER)	Not required but HIGHLY recommended. See ELECTIVES	1 Credit	See Electives
ELECTIVES	4 Credits in a Concentration Area from CTE, ART, or Foreign Language. Graduation Project 9 Credits of additional electives.	4 Credits in a Concentration Area from CTE, ART, or Foreign Language. 2 Credits from higher level courses taken during junior and/or senior years which carry 5 or 6 quality points AND graduation project Additional electives needed to reach 32 credits.	4 Credits in a Concentration Area from CTE, ART, or Foreign Language. 2 Credits from higher level courses taken during junior and/or senior years which carry 5 or 6 quality points AND graduation project Additional electives needed to reach 28 credits.
TOTAL	28 Credits	32 Credits 3.8 weighted and 3.5 unweighted GPA	28 Credits 3.5 unweighted GPA

REQUIRED TESTING

The North Carolina Public Schools Accountability model now requires testing outside of the traditional End-of-Course and VoCats testing. Effective in the 2015-2016 school year, the ACT suite of tests will be administered to students at several different grade levels. These tests are required and given to students at no cost. Below is additional information on testing requirements from the state of North Carolina.

End of Course (EOC) Tests

North Carolina has an End-of-Course test as the final exam for three high school courses: Algebra I, Biology, and English II (effective in the 2012-13 school year). All students must take and achieve a level III on each EOC to meet graduation requirements. If a student does not achieve a level III on his/her first attempt, he/she must take the test an additional time in order to attempt to obtain a level III. Students cannot be exempted from a NC EOC test.

CTE Post-Assessments

Most CTE (Career-Technical Education) courses have a required final exam called a post-assessment provided by the state of North Carolina (formerly called the VoCats test). A student in any CTE course that has an attached Post-Assessment must take the exam in order to receive course credit. Students cannot be exempted from a CTE Post-Assessment (VoCats).

NC Final Exams

North Carolina has implemented “Common Exams” for the majority of our courses that are not EOC or CTE courses. These tests will be administered at the end of each course and the exam will count as a part of the student’s grade.

PLAN

Rosman High School will administer this test to all 10th graders **at no cost**. This is a part of the new North Carolina accountability model for public schools and includes four tests of educational development: English, Mathematics, Science, and Reading, as well as an interest inventory that facilitates career and educational planning. To prepare for the ACT, North Carolina 10th graders will be administered the PLAN test each December. PLAN is a diagnostic assessment that indicates strengths and areas of need to provide a roadmap to success for

North Carolina high school students. PLAN offers a mid-point assessment of academic progress toward college and career readiness and is the most powerful predictor of performance on the ACT. It can be used for course placement, including dual enrollment and more rigorous courses. PLAN also includes a career interest inventory and an educational/career plan component.

ACT – American College Test

The ACT assessment will be given free of charge to all North Carolina 11th graders in March. This testing is required as a part of the NC high school accountability model. ACT test results are widely accepted by college admissions offices and considered an accurate gauge of classroom achievement. ACT results may be used at the high school level to identify students who need assistance with certain subject areas or academic skills, evaluate effectiveness of instruction, and make adjustments to curriculum to improve instruction. Colleges use the ACT for admissions decisions, course placement, academic advising and loans and scholarships. ACT offers a dedicated website for NC that is specifically related to our administration of the ACT.

You can find the NC specific ACT website at <http://www.act.org/stateservices/northcarolina/>.

The ACT is scored out of a scale of 36, with 36 being the highest. The student will receive a score on this scale for each section, as well as a composite score. Students may take the test additional times or in 12th grade, for a fee, to improve their score. Students taking additional administrations of the test must register six weeks in advance and such testing is not managed by the school (unlike the required administration of the ACT to 11th grade students each March). Registration dates and packets are available in the guidance office. Students may also register on-line at www.actstudent.org

WorkKeys

Students who complete the four-course Career and Technical Education sequence are administered the WorkKeys examination in the 12th grade. WorkKeys provides a gauge of career readiness and is widely recognized as an industry credential. WorkKeys assessments measure “real world” skills critical to job success. These skills are valuable for any occupation, skilled or professional at any level of education, and in any industry. This test will be administered to all 12th graders who have completed a CTE concentration in February of each

year. The list of students who are required to test is provided to the school by the NC Department of Public Instruction and the school is obligated to test all students as identified by NCDPI.

ADDITIONAL/OPTIONAL TESTING

PSAT – Preliminary Scholastic Assessment Test (Grades 9-11)

The PSAT combines multiple-choice type questions with a new writing section to measure verbal and mathematical reasoning abilities. It consists of five sections; two verbal, two mathematical, and one writing. The test measures the student's ability to reason with facts and ideas rather than memorization and reciting facts. The PSAT is not a college admissions examination, and will not pose any risk to students' future college admission prospects. The PSAT is the qualifying examination for juniors who wish to compete for scholarships offered through the National Merit Scholarship Qualifying Test, National Achievement Program, and National Hispanic Scholars Program. See your school counselor for more information.

SAT I – Reasoning Test (Grades 11-12)

College-bound Juniors and Seniors should take the SAT I which contains three sections (Math, Critical Reading, and Writing). The SAT focuses on critical thinking and problem solving skills. A student should begin taking the test by the spring of their Junior year and may repeat the test several times to improve their score. Most colleges take the highest score in each section. The SAT is scored out of a scale of 2400. On each of the timed sections you will receive a score ranging between 200-800, 800 is the highest possible score. These three scores are added up to get your total score. It is recommended that the student complete Algebra II before taking the test. Students must register about six weeks in advance. Registration dates and packets are available in the guidance office. Students may also register on-line at www.collegeboard.com

SAT II – Subject Tests (Grades 11-12)

Subject tests measure students' knowledge and skills in a particular subject and their ability to apply that knowledge. Tests are offered in many subjects. The test should be taken towards completion of a subject. Not all colleges require SAT II; generally, the most competitive schools request that a student take a Math, English with writing, and sometimes a third test such as a Science or a Foreign language. Students should check test requirements with colleges in which they have interest. Students may register for up to three tests in one day. The tests are given on the same dates as SAT I tests. Registration materials are available in the guidance office.

See your school counselor for dates for the PSAT, SAT, PLAN, ACT or visit their websites (links above).

ATHLETIC ELIGIBILITY:

- Freshman- must be promoted to High School to participate their Freshman year. Freshman must pass 6 of 8 classes to be eligible during their Sophomore year.
- To be eligible for fall semester, a student must have been promoted from their previous grade level, this includes incoming Freshman.
- To be eligible during either semester, a student must pass 3 out of 4 courses during the previous semester.
- A senior must have 20 credits and be on track to graduate to be academically eligible.
- A student not academically eligible at the beginning of any semester is not eligible at any time during the semester.
- A graduating senior must take at least two courses during the second semester in order to participate in a sport.
- Students must be in the correct level of English during either the first or second semester to be eligible to participate in sports during the school year.
- Students must be on track to graduate (not have failed more than 4 courses), to be eligible to participate in sports
- A student must have a physical exam, appropriate insurance, and sign a waiver to participate in random drug testing.
- Students must be eligible and enrolled at RHS to participate in out of season skill development sessions.
- A player must have been in attendance at least 85% of the previous semester at an approved high school. For a 90 day semester this equals to no more than 13 absences.

NORTH CAROLINA DRIVER'S LICENSE:

To be eligible to hold a graduated North Carolina Driver's License or permit, a student must pass a minimum of 70%, or 3 of 4 classes on a block schedule, of courses taken each semester, per North Carolina law.

GRADE CLASSIFICATION:

Students are eligible for various student privileges based on the number of credits earned rather than on age or the number of years spent in high school. Students are classified as follows:

Sophomore: 6 credits
Junior: 13 credits
Senior: 20 credits

Calculation of Your Grade Point Average

Your weighted GPA determines your class rank. College admissions counselors pay close attention to these numbers. For your weighted GPA, the points you receive for some courses (Honors and AP) will be greater than the points received for regular courses.

The Department of Public Instruction shall maintain a transcript system, and the local school administrative units shall use that system to produce standardized transcripts in an automated format. The standardized transcript shall include:

- grade point average (GPA),
- class rank,
- end-of-course test scores, and
- uniform course information including course code, course name, credits earned toward graduation, and credits earned for admission to an institution of higher education.

Students shall receive both an un-weighted GPA that reflects no additional weighting for advanced courses and a weighted GPA that reflects additional quality points for advanced coursework. In accordance with General Statute 116-11 (10a), grade point average values and class rank shall be calculated by a standard method devised by the University of North Carolina and NC Community College systems.

Grade point average calculations are based upon standardization of academic course levels, weighting of course grades, and grading scales.

3.1. Academic course levels and associated weights are defined as follows:

- 3.1.1. Standard courses – Course content, pace and academic rigor follow standards specified by the North Carolina Standard Course of Study (NCSCoS). Standard courses provide credit toward a high school diploma and require the end-of-course test for those courses identified as such in the NC accountability program. Quality points for the GPA calculation are assigned according to the standard 4.0 scale and receive no additional quality points.
- 3.1.2. Honors courses - Course content, pace and academic rigor place high expectations on the student, demanding greater independence and responsibility. Such courses are more challenging than standard level courses and are distinguished by a difference in the depth and scope of work required to address the NCSCoS. These courses provide credit toward a high school diploma and require the end-of-course test for those courses identified as such in the NC accountability program. An honors review process shall be followed, as outlined in the latest edition of the *North Carolina Honors Course Implementation Guide*. The state course weighting system awards the equivalent of one (1) quality point to the grade earned in Honors courses. Effective with the freshman class of 2015-16, the weighting for Honors courses shall be one-half (.5) of a quality point.
- 3.1.3. Advanced Placement/International Baccalaureate (AP/IB) courses - Course content, pace and academic rigor are considered college-level as determined by the College Board or the International Baccalaureate (IB) program and are designed to enable students to earn high scores on the AP or IB test, potentially leading to college credit. These courses provide credit toward a high school diploma and require an EOC in cases where the AP/IB course is the first course taken by a student in a subject where an EOC is required by the NC accountability program. The state weighting system awards the equivalent of two (2) quality points to the grade earned in an AP/IB course. Effective with the freshman class of 2015-16, the weight for AP/IB courses shall be one (1) quality point.
- 3.1.4. College courses (“dual enrollment”) - Course content, pace and academic rigor are, by definition, college-level for these courses. College courses, which may be delivered by a community college, public university or private college or university, provide credit toward a high school diploma and may satisfy a graduation requirement or provide an elective course credit. The state weighting system adds the equivalent of one (1) quality point to the grade earned in

community college courses included on the most recent Comprehensive Articulation Agreement Transfer List, and for courses taught at four-year universities and colleges.

High schools shall use one grading scale. The conversion of grades to quality points is standardized. Implicit is a conversion of percentage grades to letter grades according to the following widely used scale and effective for all high school students in 2015-2016, 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D; ≤ 59 = F. Grades and the corresponding number of quality points are shown below.

Standard scale — Numeric Grades with a letter grade legend.

90-100 = 4.0	80-89 = 3.0	70-79 = 2.0	60-69 = 1.0	$\leq 59 = 0.0$	WF = 0.0
FF = 0.0	WP = 0.0	INC = 0.0	AUD = 0.0	P = 0.0	

Honor Roll

At the end of each grading period, an honor roll based on a student's nine weeks' grades is calculated and published. The A Honor Roll includes students maintaining an A average in **all** classes. The A/B Honor Roll includes students maintaining a B average or higher in **all** classes. A student with a failing grade or an Incomplete in any course is not listed on the Honor Roll.

Understanding Course Descriptions

A. Prerequisites

Some courses must be taken in a logical sequence; therefore, students must adhere to the designated prerequisites. (For example, Spanish I must be passed before registering for Spanish II.)

B. Teacher Recommendations/Waivers/Self Selection

Teachers may make recommendations for placement of students based on student performance on various indicators or other courses students have taken. Should a student and parent feel the recommendation is inappropriate, a conference with the Guidance Counselor may be scheduled and a waiver may be signed by the student and parent for student placement in a course.

C. Course Loads

It is expected that every student will take eight courses each year. Certain other exceptions based on career goals may be made for second semester seniors.

D. Honors and Advanced Placement Courses

Honors and AP courses are designed with a more rigorous curriculum than the standard college preparatory North Carolina Standard Course of Study. Some core classes have an honors level and participation can be limited due to class size.

E. Enrollment, Course Offerings and Location of Course

Since career pathways call for a varied number of classes, with limited resources, some courses may be offered at only one high school or the other. Courses offered will depend on qualified staff availability and the numbers of students enrolled in each course. Allowances will be made for students to travel between schools when practical and necessary for his/her career pathway.

Example:

54162W Art II

Grades 10 - 12

Prerequisite: Art I

This is an advanced art course that is designed for students who want more art experience (practical and expressive). Students will receive hands-on experience in the following media: drawing (human form), painting, sculpture, art history, and ceramics (potter's wheel). Students need to plan to spend approximately \$25.00 on supplies. (Elective.)

Each course description contains the course number, which in this example is 54162W, and course title, in this case, Art II. It lists the grade levels at which a student may take a course (10 – 12). A prerequisite is any requirement that must be met before taking a course. In this example, the prerequisite is Art I, which means you must pass Art I before taking Art II. Some courses require the recommendation of a previous teacher, the approval of the teacher teaching the course, or a minimum grade in a previous course. Pay close attention to prerequisites because they are designed to help you select courses that are appropriate for you. If you have questions about prerequisites, speak to a teacher in the appropriate department.

In parentheses after this course you will see the word "elective." This means that this course will satisfy an elective requirement toward graduation. Some other things you might see in parentheses and an explanation of their meaning follows:

Core	-Satisfies a core requirement toward graduation (for example, English, Math, Health & PE)
TCS	-Satisfies a core requirement of the Transylvania County Scholars Program.
NCS	-Satisfies a core requirement of the North Carolina Scholars Program.
EOC	-An End-of-Course Test must be passed to receive credit for this course.
Post-Assessment	-A Post-Assessment test must be taken to receive credit for this course.
AP Exam	-Dependent on AP test scores, students may be able to receive college credit

Course Offerings

English Courses

Students are prepared for education beyond high school in all levels of English instruction, including regular English. **Activities in Honors and AP English courses are challenging and the amount of outside reading and writing is more demanding.** Students are placed in English on the basis of the recommendation of the previous English/language arts teacher, achievement in English/language arts, and performance on end-of-grade/end-of-course tests. Parents or students with questions about placement are encouraged to speak with English teachers, administrators, or guidance counselors.

10212X0W English 9 Grade 9 Prerequisite: None

Students will improve skills in analyzing literature and in effective oral and written communication, and will develop a working knowledge of literary terms. The focus is on improving language skills with grammar usage and editing. English 9 Honors (10215X0W) requires teacher recommendation, additional analytical composition and more outside reading. (Core, TCS, NCS.)

10222X0W English 10 Grade 10 Prerequisite: English 9

Emphasis is placed on improvement of composition and literature skills, while studying world literature. Composition includes samples that focus on real-world situations. Writing assignments will focus on definitions, cause and effect, and problem and solutions. Research papers and presentations are required components of the course. Students will continue to improve their public speaking skills. English 10 Honors (10225X0W) requires teacher recommendation, a minimum grade of B in English 9, more compositions, papers, and readings. (Core, EOC, TCS, NCS.)

10232X0W English II Grade 11 Prerequisite: English 10

This course, which focuses on American literature, provides many opportunities to improve skills in writing, reading, and speaking, including writing compositions about several types of literature. Students will also have a chance to connect American literature with American history. Course work includes a research paper using MLA style in preparation for senior project. English II Honors (10235X0W) requires teacher recommendation, a minimum grade of B in English 10, involves additional compositions and more outside reading. (Core, TCS, NCS.)

10237X0 AP English II Grade 11 Prerequisite: minimum of a B average in previous English Honors Classes and /or teacher approval

Advanced Placement English Language and Composition is a college level course designed for students with exceptional ability. Students should be independent learners, divergent thinkers, problem solvers, and highly curious. They also should have successfully completed two years of honors English and have a background in world literature, as well as representative pieces in American and English literature. Students are effective writers who experience few problems with grammar and spelling.

10242X0W English 12 Grade 12 Prerequisite: English 11

This course includes a study of English literature and a grammar review in preparation for college writing, with an emphasis on writing, research, and communication. All students will be required to complete a graduation project to receive credit for this course, including a term paper, based on MLA guidelines, a portfolio, and a presentation. English 12 Honors (10245X0W) requires teacher recommendation, minimum grade of a B in English 11, additional compositions and outside reading. (Core, TCS, NCS.)

10367X0 AP English 12 Grade 12 Prerequisite: minimum of a B average in previous English Honors Classes and /or teacher approval

Advanced Placement English Literature and Composition is a college level course designed for students with exceptional ability. The students are self-disciplined, mature, and intellectually curious and are achieving at the highest level. They have earned A's or B's in three years of honors or AP English and have background in major American literature. Composition and outside reading are emphasized. All students will be required to complete a graduation project to receive credit for this course, including a term paper, based on MLA guidelines, a portfolio, and a presentation, and attend after school labs. (Core, TCS, NCS)

10322X0F/10322X0S Yearbook /Newspaper Grades 9 – 12 Prerequisite: Application required

Students will study journalism, finance, sales, advertising, design, copy and photography to complete the school's yearbook and newspaper. Students must be able to work independently and cannot have any discipline referrals. After school work is required. Off-campus work may also be needed. Students must complete an application prior to registration process. Students will be selected depending on qualities they bring and opening slots. Class space is limited

Science Courses

To graduate from high school you must complete a course in Earth/Environmental Science, Biology, and a Physical Science course. The Physical Science requirement may be satisfied by taking Physical Science, Chemistry, or Physics.

35012X0W Earth/Environmental Science Grades 9 Prerequisite: None

This course is a requirement for graduation. Topics studied in Earth Science include geology, meteorology, oceanography, fresh water systems, and astronomy with an emphasis placed on their role in Earth's ecology. Honors credit available (35015X0W) (Core, NCS.)

34102X0W Physical Science Grade 9-12 Prerequisite: Algebra I

This course is the study of the major concepts of chemistry and physics. This course serves as a foundation for higher-level science courses. This course meets the physical science requirement for graduation. (Core, NCS)

33202X0W Biology Grade 10 Prerequisite: See Description

This course, required for graduation, presents the fundamentals of biology including the nature and continuity of life, the structure and function of living things, genetics, evolution, and the relationship of living things to the environment. Honors credit available (33205X0W) (Core, EOC, TCS, NCS.)

31107X01 Advanced Placement Environmental Science (AP) Grades 11-12 Prerequisite: Physical Science, Chemistry, Biology, Teacher Recommendation.

Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of scientific, political, economical, and ethical disciplines. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world, to identify and analyze natural and human caused environmental problems, to evaluate the associated risks of these environmental problems, and to examine alternative solutions for resolving and / or preventing them. (Core or Elective, NCS)

30235W Honors Anatomy & Physiology Grade 11, 12 Prerequisites: Biology and Chemistry

The human anatomy and physiology curriculum will provide students with an introduction to the structure and function of the human body. The anatomical language will give students a framework with which to explore the physiology of the human body. Applications of the course can be applied to everyday life and future careers associated with the medical field. This course should review cellular biology, chemistry of life, and 11 human body systems. Human diseases and disorders will be tied in with each system covered. Students will participate in labs and write up formal reports of these labs. Independent projects will be assigned throughout the course.

34205X0W Honors Chemistry Grades 11 – 12 Prerequisite: C or better in Geometry and Biology I, have taken or taking Algebra II in conjunction with Chemistry.

Chemistry is a lab-oriented course designed to promote an understanding and appreciation of matter and energy as it relates to our surroundings. Emphasis will be placed on ways in which events at the level of atoms influence everything going on around us. Any student pursuing a career in health occupations should consider taking chemistry. (Core or Elective, TCS, NCS.)

34305X0W Honors Physics Grades 10-12 Prerequisite: Algebra II and Geometry

Honors Physics is an advanced science course for the college-bound student planning on a career in a science, health, or science-related field. Physics is the study of matter and its motion, the causes of changes in motion and energy. Students study Physics to prepare for Science or Engineering careers, or fields such as Nursing or Physical Therapy which require an understanding of Physics. They will also be training their brains to read carefully, think logically, and solve problems. (Core, TCS, NCS)

TIME Honors Science Research Course (Offered at BHS) Grades 9-12 Prerequisites: Application

Students interested in taking the TIME Honors Science Research Course will apply the preceding winter. If accepted, students will learn about the process of science as they conduct original scientific research into topics of their choosing. They will be supported by both the teacher and scientist mentors as they choose their topic of interest, develop a testable question, design a procedure, collect and analyze data, and present their findings.

For more information, please visit: www.time4realscience.org

Credits: 1 Unit Honors

Acceptance Requirements: Attend the Spring Field Trip (March 26-28, 2015), the Summer Orientation (June 15-19, 2015) and participate in at least one science competition during 2016.

Social Studies Courses

To graduate from high school, students must take Civics & Economics or Civics & Economics honors, a World History course, and U.S. History I and II or U.S. History honors I and II. The course sequence is World History in ninth grade, Civics & Economics in tenth, and U.S. History in eleventh grade. All students are encouraged to choose additional social studies electives as interest and post-high school plans require.

43032X0W World History Grade 9 Prerequisite: None

The World History course will address six periods in the study of World History, with a key focus of study from the mid-15th century to present. The desired outcome of this course is that students develop relevant enduring understandings of current world issues and relate them to their historical, political, economic, geographical and cultural contexts. Honors credit available (43035X0W) (Core, TCS, NCS).

42092X0W Civics & Economics Grade 10 Prerequisite: World History

This course helps students understand how our government operates and how it is organized. Emphasis is placed on the Constitution, economics, the responsibility of citizenship, and the legal system. Students in the honors level of this course will be required to read, write, think, and produce assignments at a higher level of difficulty. Honors credit available (42095X0W). (Core, TCS, NCS.)

40212W American History I Grade 11 Prerequisite: Civics & Economics & World History

United States History Course I will begin with the European exploration of the new world through Reconstruction. Students will examine the historical and intellectual origins of the United States from European exploration and colonial settlement to the Revolutionary and Constitutional eras. Students will learn about the important political and economic factors that contributed to the development of colonial America and the outbreak of the American Revolution as well as the consequences of the Revolution, including the writing and key ideas of the U.S. Constitution. United States History Course II will guide students as they study the establishment of political parties, America's westward expansion, the growth of sectional conflict, how that sectional conflict led to the Civil War, and the consequences of the Civil War, including Reconstruction.

40212W American History II Grade 11 Prerequisite: Civics & Economics & World History

United States History Course II will guide students from the late nineteenth century time period through the early 21st century. Students will examine the political, economic, social, and cultural development of the United States from the end of the Reconstruction era to present times. The essential standards of United States History course II will trace the change in the ethnic composition of American society; the movement toward equal rights for racial minorities and women; and the role of the United States as a major world power. An emphasis is placed on the expanding role of the federal government and federal courts as well as the continuing tension between the individual and the state. The desired outcome of this course is for students to develop an understanding of the cause-and-effect relationship between past and present events, recognize patterns of interactions, and understand the impact of events on in the United States in an interconnected world.

The Cold War Grades 11-12 Prerequisite: Teacher Approval

Description: Our current world—its people and societies—is in many ways a product of the Cold War. Modern global relations involving the United States and other countries, regions, and networks such as Iran, North Korea, Afghanistan, Iraq, Latin America, and Al Qaeda all have connections to the Cold War. Subsequently, the direct and indirect battles associated with this post-World War II ideological conflict with the former Soviet Union have had lasting effects on our nation, our relationships with other people, and the world. The relevant lessons of the Cold War would help promote informed judgments by contemporary American citizens.

A generation of Americans understood what it meant to defeat totalitarianism, to “duck and cover,” to see presidencies dismantled, to lose our way in a war, to put a man on the moon, and to see a wall built and then torn down. Part of the Cold War's intrigue is that we could see it, and that it unfolded globally—in Berlin, in Korea and Vietnam, at the Suez Canal, in the Middle East, on the Caribbean Sea, in Eastern Europe, in Washington, D.C.—and for many Americans in the relative comfort of our living rooms. We also witnessed doctrines and theories, accords and treaties, crises and incidents, espionage and agencies, wars and protests, bombs and satellites, rock and roll—all prevalent as Americans did battle with “the evil empire.” For fifty years, major policy decisions were made, ever cognizant of a real or perceived communist threat, having substantive effects on American lives.

Much historical and contemporary debate exists as to the extent in which major political, economic, and foreign policy issues were made and are currently being decided from a Cold War frame of reference. With time and the collapse of the former Soviet Union, historians have uncovered additional archived information and formed a more diverse set of opinions about the Cold War. How do historians debate causes, consequences and significance of the Cold War? And why are these debates and questions significant to a post 9/11 world?

52582X02 Concert Band IV Grade 12 Prerequisite: Marching Band I, II, III, IV and/or Concert Band I, II, III, or Concert Band III Honors

This ensemble studies the best literature for wind ensemble and band with the emphasis on performance and sight-reading skills. All facets of the band program maintain an active performance schedule.

52585X02 Concert Band IV Honors Grade 12 Prerequisite: Marching Band I, II, III, IV and/or Concert Band I, II, III, or Concert Band III Honors

This ensemble studies the best literature for wind ensemble and band with the emphasis on performance and sight-reading skills. The Honors credit is achieved by auditioning for all-district band yearly in January, and by performing a solo at the Ensemble Concert in the spring as well as other lesser assignments that may be required throughout the semester.

53152X0W Theater Arts I Grades 9 - 12 Prerequisite: Teacher Approval

The course will be an introduction to theater literature and history. Students will develop acting skills, learn techniques of improvisation, stage movement, stage combat, and stage make up, and will perform in a minimum of one theatrical presentation. (Elective)

53162X0W/53172X0W/53182X0W Theater Arts II -IV Grades 10 – 12 Prerequisite: Theater Arts I

While continuing studies and exploration of literature and history, students will develop skills and acting in presentations. Students will perform in a minimum of one theatrical production.

Health and Physical Education Courses

63022X0G (Girls) & 63022X0B (Boys) Health and Physical Education Grade 9 Prerequisite: None

This course fulfills the requirement for graduation. Health focuses on personal health, family living education, and alcohol/drug abuse. Physical Education includes team and individual sports, fitness, conditioning, and recreation. (Core, TCS, NCS.)

62022X0G (Girls) & 62022X0B (Boys) Advanced PE Grades 9–12 Prerequisite: Health & PE Approval

This course provides a means for the advanced student to improve his/her strength (Weight Training), and flexibility, agility, and endurance (Aerobic Training). ((Elective))

62022X0A PE for Athletes Grades 9-12 Prerequisite: Members of RHS Athletic Team

This course is provided for RHS Athletes. **You must be an Athlete and a member of an athletic team.** This course will provide you with weight training specific to your sport, as well as improve flexibility, agility, and endurance. **Must have coaches' approval.** 9th graders may take 2nd semester provided they passed 1st semester Health & PE. (Elective)

Teacher's Assistants

96082X0W Media Technology Assistant Grade 11-12 Prerequisite: Librarian Approval

Upperclassmen may serve as media center assistant for credit. Limit of two (2) students per period. (Elective)

9931900 Teacher's Assistant Grade 12 Prerequisite: Teacher Approval

Seniors may arrange to serve as teachers or office assistants. **No credit is awarded** for this course; thus no effect on GPA or class rank. (Elective)

Other Electives

96102X0W Character Development and Leadership: Grades 9-12 Prerequisite: Teacher Approval

This course will address issues that affect everyone on a daily basis. Each week will consist of ethical dilemmas, character traits of successful people, and current events. Life skills such as goal setting, job interviews, and community service will be practiced. Classes will revolve around guest speakers, short reading assignments, and class discussions.

Character Development and Leadership II: Grades 10-12 Prerequisite: Teacher Approval and previous course

This course will address issues that affect everyone on a daily basis. Students taking this course will further develop their leadership skills by leading discussions, serving as group leaders, and making presentations.

Transylvania County Schools Career Technical Education (CTE)

Course and Program Information

Welcome to the Career and Technical Education Course Descriptions Handbook. This document contains descriptions and other information designed to assist students and parents in making the best decisions possible for a successful future.

All Career and Technical Education programs have work-based learning strategies appropriate for the courses available to students. These work-based learning strategies may include: field trips, shadowing, program specific projects, paid and/or unpaid internships, and supervised learning experiences. These opportunities are used to enhance learning experiences and do not take the place of required coursework for graduation

Supervised learning experiences and Career-Technical Student Organizations (CTSO) leadership activities are integral components of the programs and courses and provide many opportunities for practical application of instructional competencies.

CTSO Opportunities include:

DECA – Marketing

FBLA – Business

FCCLA – Family and Consumer Sciences

FFA – Agriculture

HOSA – Health Occupations

Skills USA – Trade and Industrial

TSA- Technology Student Association

Students in Transylvania County Schools pursuing a Future Ready Core Course of Study must complete at least four units of Career & Technical Education credit in a career cluster, with at least one course being a completer level course.

Please note: Some courses and programs are only offered at one campus. Students may take courses at any campus. If a desired course is not offered at one of our campuses, students may take that course or courses at another other school. Students are responsible for their own transportation to and from another campus. Students are encouraged to check with the Principal or Assistant Principal and the Guidance Department for course selections at other campuses. Students may also discuss their interests and selections with the Career Development Coordinator.

Additional: Courses listed herein with low numbers after registration may not be offered at any campus for the upcoming year. Students should be aware that course availability is dependent upon registration and pathway/cluster requirements. Cancellation of a particular course can result from low registration numbers.

Up to date information about CTE courses can be found online at <http://www.ncpublicschools.org/cte>

Agriculture Education

AU10 Agriscience Applications

This course focuses on integrating biological/physical sciences with technology as related to the environment, natural resources, food production, science, and agribusiness. Topics of instruction include agricultural awareness and literacy, employability skills and introduction to all aspects of the total agricultural industry. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: None = 1 Credit

Note: This is a recommended course for 9th graders interested in Agriculture Education. = 1 credit

AP41 Horticulture I

(Fall semester only)

This course provides instruction on the broad field of horticulture with emphasis on the scientific and technical knowledge for a career in horticulture. Topics in this course include plant growth and development, plant nutrition, media selection, basic plant identification, pest management, chemical disposal, customer relations, career opportunities, and leadership development. Skills in biology, chemistry, and algebra are reinforced in this course. Supervised agricultural experience programs and FFA leadership activities are integral components of the course and provide many opportunities for practical application of instructional competencies

Prerequisite: None = 1 Credit.

Students are encouraged to take Agriscience Applications prior to this course.

AP42 Horticulture II

(Spring Semester Only)

This course covers instruction that expands the scientific knowledge and skills to include more advanced scientific computations, and communication skills needed in the horticulture industry. Topics include greenhouse plant production and management, bedding plant production, watering systems, light effects, basic landscape design, installation and maintenance, lawn and turf-grass management, career planning, and leadership/personal development. Skills in biology, chemistry, and algebra are reinforced in this class.

Supervised agricultural experience programs and FFA leadership activities are integral components of the course and provide many opportunities for practical application of instructional competencies

Prerequisite: Horticulture I = 1 Credit

AA21 Animal Science I

(Fall Semester Only)

This course provides instruction focused on the basic scientific principles and processes that are involved in animal physiology, breeding, nutrition, and care in preparation for an animal science career major. Topics include animal diseases, introduction to animal science, animal nutrition, animal science issues, career opportunities, and animal evaluation. Skills in biology, chemistry, and algebra are reinforced in this course. Supervised agricultural experience programs and FFA leadership activities are integral components of the course and provide many opportunities for practical application of instructional competencies. Students are encouraged to take Agriscience Applications prior to this course.

Prerequisite: None = 1 Credit

AA22 Animal Science II

(Spring Semester Only)

This course covers instruction that expands upon the scientific knowledge and skills developed in Animal Science I to include more advanced scientific, computation, and communication skills are developed in animal science. Topics include animal waste management, animal science economics, and decision-making, global concerns in the industry, genetics, and breeding. Content knowledge in biology, chemistry, and algebra are reinforced in this class. Supervised agricultural experience programs and FFA leadership activities are integral components of the course and provide many opportunities for practical application of instructional competencies

Prerequisites: AA21 Animal Science I = 1 Credit

AN51 Environmental and Natural Resources I

This course provides an introduction to environmental studies, which includes topics of instruction in renewable and non-renewable natural resources, history of the environment, personal development, water and air quality, waste management, land use regulations, soils, meteorology, fisheries, forestry, and wildlife habitat. Supervised agricultural experience programs and FFA leadership activities are integral components of the course and provide many opportunities for practical application of instructional competencies.

Students are encouraged to take Agriscience Applications prior to this course.

Prerequisite: None = 1 credit

AN52 Environmental and Natural Resources II

This course covers instruction in best management practices in methods of environmental monitoring and conservation, air and water regulations, sampling methodologies, prescribing conservation techniques, and wildlife and forestry management. Supervised agricultural experience programs and FFA leadership activities are integral components of the course and provide many opportunities for practical application of instructional competencies **Prerequisite: AN 51 Environmental and Natural Resources I = 1 credit**

Business & Information Technologies Education

BM10 Microsoft IT Academy: Word and Power Point

Students in Microsoft IT Academies benefit from world-class Microsoft curriculum and software tools to tackle real-world challenges in the classroom environment. In the first part, students will learn to use the newest version of Microsoft Word interface, commands, and features to create, enhance, customize and share, as well as, create complex documents and publish them. In the second part, students will learn to use the newest version of Microsoft PowerPoint interface, commands, and features to create, enhance, customize and deliver presentations. English language arts are reinforced. Work based learning strategies appropriate for this course include, cooperative education, internship, service learning, and job shadowing. Apprenticeship is not available for this course. Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. This course can help prepare students for the Microsoft Office Specialist (MOS) in Word and/or Powerpoint. **Prerequisite: None. = 1 Credit**

BM20 Microsoft IT Academy: Excel and Access

Students in Microsoft IT Academies benefit from world-class Microsoft curriculum and cutting-edge software tools to tackle real-world challenges in the classroom environment. The first part of the class is designed to help students use the newest version of Microsoft Excel interface, commands, and features to present, analyze, and manipulate various types of data. Students will learn to manage workbooks as well as how to manage, manipulate, and format data. In the second part of the class students will learn how to create and work with a database and its objects by using the new and improved features in newest version of Microsoft Access. Students will learn how to create, modify, and locate information as well as how to create programmable. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Cooperative education is not available for this course. Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. This course can help prepare students for the Microsoft Office Specialist (MOS) in Excel and or Access.

Prerequisite: None. = 1 Credit

BD10 Multimedia and Web Design

This course focuses on desktop publishing, graphic image design, computer animation, virtual reality, multimedia production, and webpage design. Communication skills and critical thinking are reinforced through software applications. English language skills are reinforced. Work-based learning strategies appropriate for this course include cooperative education, internship, school based enterprise, service learning, field trips, and job shadowing. Apprenticeship is not available for this course. Future Business Leaders of America (FBLA) leadership activities, provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. **Prerequisite: BM10 Microsoft Word/Powerpoint. = 1 credit**

BF05 Personal Finance

Personal Finance prepares students to understand economic activities and challenges of individuals and families, the role of lifestyle goals in education and career choices, procedures in a successful job search, financial forms used in independent living, and shopping options and practices for meeting consumer needs. The course also prepares students to understand consumer rights, responsibilities, and information, protect personal and family resources, and apply procedures for managing personal finances. Work-based learning experiences appropriate work-based learning strategies include mentorship, school-based enterprise, service learning, and job shadowing. Related activities in DECA, FBLA, and FCCLA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experience.

Prerequisite: None = 1 Credit

BF10 Principles of Business and Finance

This course introduces students to topics related to business, finance, management, and marketing to cover business in the global economy, functions of business organization and management, marketing basics, and significance of business financial and risk management. English language arts, social studies, and mathematics are reinforced. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise service learning, and job shadowing. Cooperative education is not available for this course. Apprenticeship is not available for this course. DECA and FBLA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: None = 1 Credit

BB30 Business Law

This course is designed to acquaint students with the basic legal principles common to all aspects of business and personal law. Business topics include contract law, business ownership including intellectual property, financial law, and national and international laws. Personal topics include marriage and divorce law, purchasing appropriate insurance, renting and owning real estate, employment law, and consumer protection laws. Social studies and English language arts are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, internship, and job shadowing. Apprenticeship and cooperative education are not available for this course. Future Business Leaders of America competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: BF10 Principles of Business and Finance = 1 Credit

BD12 E – Commerce I

NOTE: Honors Course.

This course is designed to help students master skills in the design and construction of complex web sites for conducting business electronically. Emphasis is on skill development in advanced web page construction and entrepreneurial applications of conducting business electronically as well as economic, social, legal, and ethical issues related to electronic business. Students learn through project-based applications as they plan, design, create, publish, maintain, and promote an e-commerce website. Art is reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. FBLA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

This course will be taught online only on a limited basis.

Prerequisite: BD10 Multimedia and Web Design = 1 Credit

ME11 Entrepreneurship I

In this course students evaluate the concepts of going into business for themselves and working for or operating a small business. Emphasis is on the exploration of feasible ideas of products/services, research procedures, business financing, marketing strategies, and access to resources for starting a small business. Students develop components of a business plan and evaluate startup requirements. English language arts and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing.

Prerequisite: MM51 Marketing OR BF05 Personal Finance OR BF10 Principles of Business and Finance. = 1 Credit

CS11 Project Management I

This course will introduce students to the principles, concepts, and software applications used in the management of projects. Through project-based learning, students will understand how to use the framework of initiating, planning, executing, monitoring, controlling, and closing a project in authentic situations. Art, English language arts, and mathematics are reinforced. Work-based learning strategies appropriate for this course include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA, FFA, FBLA, FCCLA, SkillsUSA, and TSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. **No Prerequisite. = 1 Credit**

Family and Consumer Sciences Education

FN41 Foods I

This course examines the nutritional needs of the individual. Emphasis is placed on the relationship of diet to health, kitchen and meal management, food preparation and sustainability for a global society, and time and resource management. English language arts, mathematics, science, and social studies are reinforced. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: None = 1 Credit

FN42 Foods II – Enterprise

This course focuses on advanced food preparation techniques while applying nutrition, food science, and test kitchen concepts using new technology. Food safety and sanitation receive special emphasis, with students taking the exam for the ServSafe credential from the National Restaurant Association. Students develop skills in preparing foods such as beverages, salads and dressing, yeast breads, and cake fillings and frostings. A real or simulated in-school food business component allows students to apply instructional strategies and workplace readiness skills to an authentic experience. FCCLA leadership activities provide the opportunity to apply instructional competencies and workplace readiness skills to authentic experiences. **Prerequisite: FN41 Foods I or FH21 Culinary Arts and Hospitality = 1 Credit**

Health Science Education

Health Team Relations

This course is designed to assist potential health care workers in their role and function as health team members. Topics include terminology, the history of health care, health care agencies, ethics, legal responsibilities, careers, holistic health, human needs, change, cultural awareness, communication, medical math, leadership, and career decision-making. Basic academic skills, employability skills, critical thinking skills, teamwork, and the use of technology are reinforced in this course. HOSA activities support networking with health care agencies and professionals through the development of clinical expertise and volunteerism. The next courses in sequence are Biomedical Technology or Health Sciences I. **Recommended for 9th grade.**

Prerequisite: None -1 credit

NOT OFFERING 2015-16 at BHS ? RHS

HU40 Health Science I

This course investigates the health care delivery system, its services, occupations, and related sciences. Topics include the study of the language of medicine, medical mathematics, microbiology, anatomy and physiology, diseases/disorders, diagnoses, treatments, patient/client care regimens, career development, and future technological innovations. Skills in science, mathematics, communications, social studies and health are reinforced in this course. HOSA activities support networking with health care agencies and professionals through the development of clinical expertise and volunteerism. The next course in the sequence is Health Science II. **Prerequisite: None = 1 Credit**

HU42 Health Science II

This course is designed to help students expand their understanding of financing and trends of health care agencies, fundamentals of wellness, legal and ethical issues, concepts of teamwork, and effective communication. Students will learn health care skills related to the Health Science Career Clusters and the health care core standards. American Heart Association guidelines will be used for CPR and first aid training. Skills in science, mathematics, communications, and health are integrated in this course. There is no clinical for this course. The next course in the sequence is Nursing Fundamentals.

Prerequisite: Grade of B or better in Health Sciences I, strong work ethic, and teacher recommendation. = 1 Credit

HN43 Nursing Fundamentals

This course is designed for students interested in medical careers where personal care and basic nursing skills are used. This course is an enhanced adaptation of the North Carolina Division of Health Service Regulation (DHSR) Nurse Aide I (NAI) curriculum and helps prepare students for the National Nurse Aide Assessment (NNAAP). Students who pass the NNAAP become listed on the [NC NAI](#)

[Registry](#). English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include a required clinical internship in a long-term care agency. Healthcare agencies may require testing for tuberculosis and/or other diseases, drug testing, and a criminal record check. Students must provide their own transportation and pay for background checks, uniforms, and Health Care Provider immunizations. Cooperative education is not available for this course. HOSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: Grade of B or better in HU42 Health Science II, strong work ethic, and teacher recommendation. –2 blocks, 2 credit course

HH32 Pharmacy Technician

This course has self-paced, on-line instruction designed to prepare high school seniors for a pharmacy technician career. Topics included in this course are federal law, medication used in major body systems, calculations, and pharmacy operations. Mathematics is reinforced in this course. Work-based learning strategies appropriate for this course include an apprenticeship, cooperative education, internship, or mentorship. Health Occupations Students of America (HOSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. This course is accredited by the Accreditation Council for Pharmacy Education (APCE). Upon successful completion of this course and after graduation, the student is eligible to take the [Pharmacy Technician Certification Board](#) (PTCB) exam.

Prerequisite: Grade of B or better in Health Science II, strong work ethic, and teacher recommendation. 1 credit course

Marketing and Entrepreneurship Education

MM51 Marketing

In this course, students develop an understanding of the processes involved from the creation to the consumption of products/services. Students develop an understanding and skills in the areas of distribution, marketing-information management, market planning, pricing, product/service management, promotion, and selling. Students develop an understanding of marketing functions applications and impact on business operations. Mathematics and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: None = 1 Credit

Marketing Management

This course is designed to continue the foundations covered in Marketing or Fashion Merchandising. Topics of study include recruiting, hiring, training and evaluating employees; information management; purchasing; pricing; ethics; sales management; and financing. Skills in math, human relations, communications, and technical writing are reinforced in this course. DECA leadership activities, meetings, conferences, and competitions provide many opportunities for application of instructional competencies.

Prerequisite: Marketing or Fashion Merchandising -1 credit

BF05 Personal Finance

Personal Finance prepares students to understand economic activities and challenges of individuals and families, the role of lifestyle goals in education and career choices, procedures in a successful job search, financial forms used in independent living, and shopping options and practices for meeting consumer needs. The course also prepares students to understand consumer rights, responsibilities, and information, protect personal and family resources, and apply procedures for managing personal finances. Work-based learning experiences appropriate work-based learning strategies include mentorship, school-based enterprise, service learning, and job shadowing. Related activities in DECA, FBLA, and FCCLA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experience.

Prerequisite: None =1 Credit

BF10 Principles of Business and Finance

This course introduces students to topics related to business, finance, management, and marketing to cover business in the global economy, functions of business organization and management, marketing basics, and significance of business financial and risk management. English language arts, social studies, and mathematics are reinforced. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise service learning, and job shadowing. Cooperative education is not available for this course. Apprenticeship is not available for this course. DECA and FBLA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: None =1 Credit

CS11 Project Management I

This course will introduce students to the principles, concepts, and software applications used in the management of projects. Through project-based learning, students will understand how to use the framework of initiating, planning, executing, monitoring, controlling, and closing a project in authentic situations. Art, English language arts, and mathematics are reinforced. Work-based learning strategies appropriate for this course include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA, FFA, FBLA, FCCLA, SkillsUSA, and TSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. **No Prerequisite. = 1 Credit**

ME11 Entrepreneurship I

In this course students evaluate the concepts of going into business for themselves and working for or operating a small business. Emphasis is on the exploration of feasible ideas of products/services, research procedures, business financing, marketing strategies, and access to resources for starting a small business. Students develop components of a business plan and evaluate startup requirements. English language arts and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing.

Prerequisite: MM51 Marketing OR BF05 Personal Finance OR BF10 Principles of Business and Finance. = 1 Credit

Fashion Merchandising

This course is designed for students interested in the fashion industry and the merchandising of fashion. Topics include an overview of the fashion industry, evolution and movement of fashion, career development, merchandising, risk management, promotion, and fashion show production. Skills in research, mathematics, textile chemistry, and technical writing are reinforced in this course. Work-based learning strategies appropriate for this course include cooperative education or paid/unpaid internships. Marketing simulations, projects, teamwork, DECA leadership activities, meetings, conferences, and competitions provide many opportunities for application of instructional competencies.

Prerequisite: None -1 credit

Not Offering 2015-16

MH42 Hospitality and Tourism

In this course, students acquire understanding of the economic impact and marketing strategies for hospitality and tourism destinations. Emphasis is on destination complexity, customer relations, economics, legal and ethical responsibilities, safety and security, and tourism promotion. English/language arts, mathematics, social studies and technology are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: MM51 Marketing or BF10 Principles of Business and Finance or MH31 Sports and Entertainment Marketing I = 1 Credit

MH31 Sports and Entertainment Marketing I

In this course, students are introduced to the industry of sports, entertainment, and event marketing. Students acquire transferable knowledge and skills among related industries for planning sports, entertainment, and event marketing. Topics included are branding, licensing, and naming rights; business foundations; concessions and on-site merchandising; economic foundations; human relations; and safety and security. Mathematics and social studies are reinforced. Work-based learning strategies appropriate include cooperative

education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: None = 1 credit

MH32 Sports and Entertainment Marketing II

In this course, students acquire an understanding of selling, promotion, and market planning of sports, entertainment, and event marketing. English/language arts, mathematics and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: MH31 Sports and Entertainment Marketing I = 1 Credit

Trade and Industrial Education

IC00 Core and Sustainable Construction

This course covers the National Center for Construction Education and Research (NCCER) Core certification modules required for all of the NCCER curriculum-area programs, and an additional Green module. The course content includes: basic safety, introduction to construction math, introduction to hand tools, introduction to power tools, introduction to blueprints, material handling, basic communication skills, and basic employability skills, and “Your Role in the Green Environment”. The additional Green module has been added to provide students with instruction in the green environment, green construction practices, and green building rating systems. Also it will help students better understand their personal impacts on the environment and make them more aware of how to reduce their carbon footprint. English Language Arts and Mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. This course helps prepare students for additional National Center for Construction Education and Research (NCCER) Core certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: None, Recommended for 9th grade =1 Credit

Feeds Carpentry I, Drafting I, and Masonry I

ADDED

IU10 Introduction to Trade and Industrial Education (ITIE)

This course will introduce students to concepts needed for careers in Trade and Industry professions including Advanced Manufacturing careers. Skillsets specific to Trade and Industry careers will be provided to include key concepts from the systems used in manufacturing processes and will incorporate problem-solving, design, technical communication, modeling, testing, evaluation, and implications of technology. Activities associated with the major program areas of Trade and Industrial Education will provide practical applications to enhance student learning. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are not possible for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: None, Recommended for 9th grade = 1 Credit

Feeds Carpentry I, Digital Media, Drafting I, Masonry I, and Welding I

IC21 Carpentry I

This course covers basic carpentry terminology and develops technical aspects of carpentry with emphasis on development of introductory skills. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. This course helps prepare students for National Center for Construction Education and Research (NCCER) certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

Prerequisite: IC00 Core and Sustainable Construction = 1 Credit

IC22 Carpentry II

This course covers additional technical aspects of carpentry with emphasis on development of intermediate skills. The course content includes floor systems, wall and ceiling framing, roof framing, introductions to concrete, reinforcing materials and forms, windows and exterior doors, and basic stair layout. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. This course helps prepare students for National Center for Construction Education and Research (NCCER) certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

Prerequisite: IC21 Carpentry I = 1 Credit

IC23 Carpentry III

This course develops advanced technical aspects of carpentry with emphasis on development of skills. The course content includes roofing applications, thermal and moisture protection, exterior finishing, cold formed steel framing and drywall installations. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. This course helps prepare students for National Center for Construction Education and Research (NCCER) certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

Prerequisite: IC22 Carpentry II =1 Credit

IC61 Drafting I

This course introduces students to the use of simple and complex graphic tools used to communicate and understand ideas, concepts and trends found in the areas of architecture, manufacturing, engineering, science, and mathematics, sketching and computer assisted design (CAD) skills and techniques. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: None = 1 Credit

IC62 Drafting II - Architectural

This course focuses on the principles, concepts, and use of complex graphic tools used in the field of architecture, structural systems, and construction trades. Emphasis is placed on the use of computer assisted design (CAD) tools in the creation of floor plans, wall sections, and elevation drawings. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: IC61 Drafting I = 1 Credit

IC63 Drafting III - Architectural

This course introduces students to advanced architectural design concepts. Emphasis is placed on the use of computer assisted design (CAD) tools in the design and execution of site and foundation plans as well as topographical information and detail drawings of stairs and wall sections. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

Prerequisite: IC62 Drafting II -

Architectural = 1 Credit

IV22 Drafting II – Engineering

This course focuses on engineering graphics introducing the student to symbol libraries, industry standards, and sectioning techniques. Topics include coordinate systems, principles of machine processes and gearing, and the construction of 3-D wireframe models using computer assisted design (CAD). English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: IC61 Drafting I = 1 Credit

IV23 Drafting III – Engineering

This course introduces the student to advanced engineering concepts using computer assisted design (CAD) tools. Topics studied include descriptive geometry, geometric tolerancing, and advanced engineering design concepts such as surface and solid modeling. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

Prerequisite: IV22 Drafting II - Engineering II = 1 Credit

IC11 Masonry I

This course covers basic masonry terminology and develops technical aspects of masonry with emphasis on development of introductory skills. This course introduces the nature of masonry technology, materials and supplies, and employability skills. Topics include safety, layout, tools, leveling, plumbing, use of straight-edge, and jointing brick and block in wall construction. Mathematics and English language arts are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. This course helps prepare students for National Center for Construction Education and Research (NCCER) certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: IC00 Core and Sustainable Construction above =1 Credit

IC12 Masonry II

This course builds on skills mastered in Masonry I and provides advanced masonry skills including measurements, drawing and specifications, mortar, masonry units, and installation techniques. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. Geometry is recommended as preparation for this course. This course helps prepare students for National Center for Construction Education and Research (NCCER) certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: IC11 Masonry I = 1 Credit

IC13 Masonry III

This course develops advanced technical aspects of Masonry with emphasis on development of skills introduced in Masonry II. The course content includes residential plans and drawing interpretation, residential masonry, grout and other reinforcement, and metalwork in masonry. Introductory skills for the Crew Leader are also introduced in this course. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. This course helps prepare students for National Center for Construction Education and Research (NCCER) certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

Prerequisite: IC12 Masonry II, please discuss with instructor prior to registration. = 1 Credit

IA31 Digital Media

This course focuses on the digital aspects of designing and programming needed in the digital printing age. Knowledge needed in this area requires students to understand the basic concepts and procedures in each step of file preparation. Students learn about file-related issues and to demonstrate various skills in creating and exporting images and laying out a page in appropriate software. Presses are not required. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisites: None = 1 Credit

IA32 Advanced Digital Media

This course provides students with industry knowledge and skills in the overall digital media design field. Areas covered in these two courses include graphics, animation, video, and web design. An emphasis is placed on the fundamental concepts of graphic design, various digital media technologies, non-linear editing, product development and design, and career development. Art, English language

arts, and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisites: IA31 Digital Media = 1 Credit

Digital File Preparation

This course provides students with industry knowledge and skills in the overall digital media design field. Areas covered in these two courses include graphics, animation, video, and web design. An emphasis is placed on the fundamental concepts of graphic design, various digital media technologies, non-linear editing, product development and design, and career development. Art, English language arts, and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisites: Digital Media– 1 credit

IM61 Welding Technology I

This course covers basic industrial and construction welding practices, occupation characteristics, and employment opportunities. Topics include safety, tools and equipment, print reading, measurement, thermal cutting processes, basemetal preparation and shielded metal arc welding (SMAW). Arts, English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

Prerequisites: None = 1 Credit

IM62 Welding Technology II

This course introduces advanced welding and cutting practices used in industry and construction and emphasizes hands-on experience. Topics include safety, plasma arc cutting (PAC), inspection, weld fit-up and testing, metal properties, and shielded metal (SMAW) arc welding. Arts, English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

Prerequisites: IM61 Welding I = 1 Credit

CS95 CTE Advanced Studies

This culminating course is for juniors and seniors who have earned two technical credits, one of which is a completer course, in one Career Cluster. The Advanced Studies course must augment the content of the completer course and prepare students for success in transitioning to postsecondary education and future careers. Students work under the guidance of a teacher with expertise in the content of the completer course in collaboration with community members, business representatives, and other school-based personnel. **The four parts of the course include writing a research paper, producing a product, developing a portfolio, and delivering a presentation. Students must submit a proposal for their project within the first 10 school days of the semester.** Students demonstrate their abilities to use 21st century skills. DECA (an association for Marketing Education students), Future Business Leaders of America (FBLA), FFA, Family, Career and Community Leaders of America (FCCLA), Health Occupations Students of America (HOSA), SkillsUSA, and Technology Student Association (TSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

Prerequisite: Two technical credits in one Career Cluster = 1 Credit (Not an Honors Credit)

CS97 CTE Internship (135 Hours)

A CTE Internship allows for additional development of career and technical competencies within a general career field. Internships allow students to observe and participate in daily operations, develop direct contact with job personnel, ask questions about particular careers, and perform certain job tasks. This activity is exploratory and allows the student to get hands-on experience in a number of related activities. The teacher, student, and the business community jointly plan the organization, implementation, and evaluation of an internship, regardless of whether it is an unpaid or paid internship.

Prerequisite: CTE Director Approval = 1 Credit

CTE Career and College Promise (See Blue Ridge Community College Courses Listed Below)

Career and College Promise provides a way for any North Carolina high school student in good academic standing who meets eligibility requirements to take community college courses while still in high school. Students can combine high school and postsecondary courses to earn a credential, certificate, or diploma in a technical field and meet requirements for CTE concentration. Credit may be transferrable to another North Carolina community college, to UNC System institutions, and to many of the state's independent colleges and universities. Students should work with their school counselor to determine what CTE pathways are available at their local community college or in what other ways they can access this program.

Prerequisite: None = credit dependent on institution awarding credit.

Flexible Options for Learning in Transylvania County Schools

Are you interested in earning free college credits while still in high school? Are you looking for an honors, AP, or Career and Technical Education course not offered at your school? Consider the following options:

Blue Ridge Community College – Courses are offered online, at your school campus, and at the BRCC-Transylvania Campus. For more information reference pages 31-42 of this guide or go online at <http://www.blueridge.edu/>

NC Virtual Public School – Online courses in many subject areas. For more information reference pages 43-46 of this guide or go online at <http://www.ncvps.org/courses/>

NCSSM – NCSSM began offering distance education courses via the Information Highway in 1994. Since that time, over 10,000 students have participated in video courses for high school credit—many of them in Advanced Placement. While the program initially served rural schools, it has expanded to include all North Carolina schools. As video has become cheaper and broadband access to schools has increased, the program has grown, with new courses being added regularly. For more information reference pages 47-51 of this guide.

Other High Schools – Consider taking a course that is offered at another high school campus in Transylvania County. If you are interested in this option, a school counselor will be glad to explore options and make the scheduling arrangements for you. Here's what to do:

1. Pick up a copy of the other school's course guide in your guidance office.
2. Visit your school counselor to sit down and review your schedule options.
3. That's all! We will do the work for you!

Earning Credit by Demonstrated Mastery (CDM)

Starting in 2015, students will be able to earn credit for a course without spending a set number of hours taking the course in a classroom.

Click here for more information: http://www.tcsnc.org/departments/curriculum_and_instruction/credit_by_demonstrated_mastery/

“Credit by Demonstrated Mastery” is the process by which a school shall, based upon a body-of-evidence, award a student credit in a particular course without requiring the student to complete classroom instruction for a certain amount of seat time.

Under the state's new Credit by Demonstrated Mastery (CDM) option, uniquely qualified students may “test out” or bypass a course if they have already mastered the content. The program provides another opportunity for students to learn new content, to challenge themselves with the next level of rigor in a subject, and even graduate early. This option is not designed to replace existing accelerated pathways, such as the Academically and Intellectually Gifted (AIG) program.

Blue Ridge Community College

Concurrent Enrollment

Note: There are several dual enrollment options for qualified students to take courses through Blue Ridge Community College in several areas. Students participating may earn dual enrollment credit through Huskins Bill arrangements between Transylvania County Schools and Blue Ridge Community College. Students are responsible for their own transportation to one of the BRCC campuses for this coursework. NOTE: In addition to the courses listed below, there may be additional course offerings available through Blue Ridge. Please check with your Guidance Counselor or Career Development Coordinator for additional options.



**Associate in Arts Pathway
Associate in Science Pathway
2015-2016**

These courses are available to all NC juniors and seniors with a weighted GPA of 3.0 who demonstrates college readiness from an assessment or placement test in English, reading, and mathematics. Participation requires progress toward high school graduation and a 2.0 GPA in college coursework after completion of two college classes. Students are exempt from tuition, but required to pay fees, books, and supplies.

Fall Semester 2015 and Spring Semester 2016

***ART-111 Art Appreciation 3 Credit Hours**

Monday and Wednesday, 2-3:15 p.m.; BRCC Transylvania Campus

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

***ECO-251 Prin. of Microeconomics (Spring Semester) 3 Credit Hours**

Online Course

This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

***ECO-252 Prin. Of Macroeconomics (Fall Semester) 3 Credit Hours**

Online Course

This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. This course has been approved to satisfy the Universal General Education Transfer Component of the Comprehensive Articulation Agreement general education social/behavioral science requirement for the Associate in Arts and the Associate in Science Degree.

***ENG-111 Expository Writing 3 Credit Hours**

Tuesday and Thursday, 8-9:15 a.m.; BRCC Transylvania Campus

This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course will also teach the process of academic research emphasizing MLA documentation. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English Composition.



Interpreter Education 2015-2016

These courses are available to all NC juniors and seniors with a weighted GPA of 3.0 **OR** the recommendation of the high school principal or designee. Participation requires progress toward high school graduation and a 2.0 GPA in college coursework after completion of two college classes. Students are exempt from tuition, but required to pay fees, books, and supplies.

Courses are taught at Blue Ridge Community College, Transylvania Campus.

Fall Semester 2015 and Spring Semester 2016

***ASL-111/181 Elementary ASL I (Hybrid)**

4 Credit Hours

Monday-Thursday, 2-3:30 p.m. (Fall Semester: August-October)

Monday-Thursday, 2-3:30 p.m. (Spring Semester: January-March)

This course introduces the fundamental elements of American Sign Language within a cultural context. Emphasis is placed on the development of basic expressive and receptive skills. Upon completion, students will be able to comprehend and respond with grammatical accuracy to expressive American Sign Language and demonstrate cultural awareness. This course has been approved to satisfy the comprehensive articulation agreement general education core requirement in humanities/fine arts.

***ASL-112/182 Elementary ASL II**

4 Credit Hours

Prerequisite: ASL 111/181

Monday-Thursday, 2-3:30 p.m. (Fall Semester: October-December)

Monday-Thursday, 2-3:30 p.m. (Spring Semester: March-May)

This course is a continuation of ASL 111 focusing on the fundamental elements of American Sign Language in a cultural context. Emphasis is placed on the progressive development of expressive and receptive skills. Upon completion, students should be able to comprehend and respond with increasing accuracy to expressive American Sign Language and demonstrate cultural awareness. This course has been approved to satisfy the comprehensive articulation agreement general education core requirement in humanities/fine arts.

Costs:

Tuition - Free

Fees – approximately \$40 per semester

Textbooks are available through College Bookstore

***These courses will count as honors (5.0) weighted electives for high school graduation.**



**Business Administration Pathway
Online Courses
2015-2016**

These courses are available to all NC juniors and seniors with a weighted GPA of 3.0 **OR** the recommendation of the high school principal or designee. Participation requires progress toward high school graduation and a 2.0 GPA in college coursework after completion of two college classes. Students are exempt from tuition, but required to pay fees, books, and supplies.

***BUS-110 Introduction to Business (Fall & Spring Semesters) 3 Credit Hours
Online Course**

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**BUS-137 Principles of Management (Spring Semester) 3 Credit Hours
Online Course**

This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

***CIS-110 Introduction to Computers (Fall & Spring Semesters) 3 Credit Hours
Online Course**

This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics (quantitative Option).

**MKT-120 Principles of Marketing (Fall Semester) 3 Credit Hours
Online Course**

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

Costs:

Tuition - Free

Fees – approximately \$15 per semester

Textbooks available through College Bookstore

***These courses will count as honors (5.0) weighted electives for high school graduation.**



**Early Childhood Education Pathways
Online Courses
2015-2016**

These courses are available to all NC juniors and seniors with a weighted GPA of 3.0 **OR** the recommendation of the high school principal or designee. Participation requires progress toward high school graduation and a 2.0 GPA in college coursework after completion of two college classes. Students are exempt from tuition, but required to pay fees and supplies.

Education-Infant and Toddler Pathway

Fall Semester 2015 (Online)

EDU-119	Intro to Early Child Education	4 Credit Hours
*EDU-144	Child Development I	3 Credit Hours
*EDU-153	Health, Safety, & Nutrition	3 Credit Hours

Spring Semester 2016 (Online)

*EDU-131	Child, Family, & Community	3 Credit Hours
*EDU-234	Infants, Toddler & Twos	3 Credit Hours
*EDU-234A	Infants, Toddlers, & Twos Lab	1 Credit Hour

Education-Preschool Pathway

Fall Semester 2015 (Online)

EDU-119	Intro to Early Child Education	4 Credit Hours
*EDU-146	Child Guidance	3 Credit Hours
*EDU-153	Health, Safety, and Nutrition	3 Credit Hours

Spring Semester 2016 (Online)

*EDU-131	Child, Family, & Community	3 Credit Hours
*EDU-145	Child Development II	3 Credit Hours

Costs:

Tuition - Free

Fees – approximately \$20 per semester

Textbooks available through College Bookstore

***Demonstrate college readiness on an assessment or placement test in English and reading.**



**Fire Protection Technology
Online Courses
2015-2016**

These courses are available to all NC juniors and seniors with a weighted GPA of 3.0 **OR** the recommendation of the high school principal or designee. Participation requires progress toward high school graduation and a 2.0 GPA in college coursework after completion of two college classes. Students are exempt from tuition, but required to pay fees and supplies.

Fall Semester 2015

FIP-120 Introduction to Fire Protection (Online) 3 Credit Hours
This course provides an overview of the history, development, methods, systems, and regulations as they apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and other related topics. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

FIP-124 Fire Prevention and Public Education (Online) 3 Credit Hours
This course introduces fire prevention concepts as they relate to community and industrial operations. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group, meeting NFPA 1021.

Spring Semester 2016

FIP-132 Building Construction (Online) 3 Credit Hours
This course covers the principles and practices related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction as related to fire conditions meeting NFPA 1021.

FIP-146 Fire Protection Systems (Online) 4 Credit Hours
This course introduces various types of automatic sprinklers, standpipes, fire alarm systems, and fixed and portable extinguishing systems referenced to NFPA standard 25, including their operation, installation, and maintenance. Topics include wet and dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, including application, testing, and maintenance of Halon, carbon dioxide, dry chemical, and special extinguishing agents utilized in fixed and portable systems. Upon completion, students should be able to demonstrate a working knowledge of sprinkler and alarm systems, both fixed and portable, including appropriate application, operation, inspection, and maintenance requirements.

Costs:

Tuition - Free

Fees – approximately \$15 per semester

Textbooks provided by Transylvania County Schools



Automotive Systems Technology 2015-2016

These courses are available to all NC juniors and seniors with a weighted GPA of 3.0 **OR** the recommendation of the high school principal or designee. Participation requires progress toward high school graduation and a 2.0 GPA in college coursework after completion of two college classes. Students are exempt from tuition, but required to pay fees and supplies.

Courses are taught at Blue Ridge Community College Transylvania Campus.

Fall Semester 2015

Monday-Friday, 12-3:10 p.m.

AUT-141	Suspension & Steering Sys	3 Credit Hours
AUT-141A	Suspension & Steering Lab	1 Credit Hour
AUT-181	Engine Performance I	3 Credit Hours
AUT-181A	Engine Performance I Lab	1 Credit Hour

Spring Semester 2016

Monday-Friday, 12-3:10 p.m.

AUT-183	Engine Performance	4 Credit Hours
TRN-140	Transport Climate Control	2 Credit Hours
TRN-140A	Transport Climate Control Lab	2 Credit Hours

Costs:

Tuition - Free

Fees – approximately \$40 per semester

Lab Fees – approximately \$50 per semester

Textbooks provided by Transylvania County Schools

Tools - Required tools approximately \$240



Welding Technology 2015-2016

These courses are available to all NC juniors and seniors with a weighted GPA of 3.0 **OR** the recommendation of the high school principal or designee. Participation requires progress toward high school graduation and a 2.0 GPA in college coursework after completion of two college classes. Students are exempt from tuition, but required to pay fees and supplies.

Courses are taught at Brevard High School. Classes meet Monday through Friday for the full school year.

Fall Semester 2015 – Third and Fourth Blocks

WLD-110 Cutting Processes 2 Credit Hours

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness. A lab fee is required.

WLD-115 SMAW (Stick) Plate 5 Credit Hours

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes. A lab fee is required.

Spring Semester 2016 – Third and Fourth Blocks

WLD-121 GMAW(MIG) FCAW/Plate 4 Credit Hours

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions. A lab fee is required.

WLD-131 GTAW (TIG) Plate 4 Credit Hours

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials. A lab fee is required.

Costs:

Tuition - Free

Textbooks provided by Transylvania County Schools

Lab Fees - may be required

Students must have work clothing:

Ankle high or above leather work boots (steel toe not required)

Blue jeans, Duck Head, Carhartt or any type heavy cotton pants

Heavy cotton, long-sleeve shirt or jacket

No polyester

No nylon

No plastic of any type, hence no athletic shoes



North Carolina Virtual Public School

Course Descriptions with Prerequisites, Textbook, and Tech Requirements

General Technical Requirements for all of our courses can be found on our main Web site at <http://www.ncvps.org/index.php/technology-requirements/>.

NOTE: Courses described here may not reflect courses offered in a particular term.

SUBJECT	COURSE CODE	TITLE	DURATION	CREDIT	LMS
Arts	54152X0	Visual Arts (Beginning)	Block	1	Moodle
	54162X0	Visual Arts (Intermediate)	Block	1	Moodle
	54622X0	Visual Arts Specialization (Intermediate): Art of Game Design	Block	1	Moodle
	54622X0	Visual Arts Specialization (Intermediate): Art of Advertising	Block	1	Moodle
	54622X0	Visual Arts Specialization (Intermediate): Art of Photography	Block	1	Moodle
	54635X0	Visual Arts Specialization (Proficient): Digital Photography	Block	1	Blackboard
	52162X0	Music Specialization (Beginning): Music Appreciation	Block	1	Moodle
	52162X0	Music Specialization (Beginning): Music Business and Recording	Block	1	Moodle
	54152X0	Visual Arts Specialization (Beginning): Non Western Art	Block	1	Blackboard
	54622X0	Visual Arts Specialization (Intermediate): Art of Videography	Block	1	Moodle

	54622X0	Visual Arts Specialization (Intermediate): Visual Journaling	Block	1	Moodle
	54622X0	Visual Arts Specialization (Intermediate): Art of Fashion	Block	1	Moodle
Career and Technical Education	BA102X0	Accounting I	Block	1	Blackboard
	CC452X0	Career Management	Block	1	Moodle
	BP102X0	Computer Programming I	Block	1	Moodle
	BP405X0	Pilot-Computer Science Principles	Block	1	Moodle
	BD122X0	eCommerce 1	Block	1	Moodle
	ME112X0	Entrepreneurship I (BE/ME)	Block	1	Moodle
	BF052X0	Personal Finance	Block	1	Blackboard
	BF102X0	Principles of Business and Finance (BE/ME)	Block	1	Moodle
	BP202X0	SAS Computer Programming	Block	1	Moodle
	BM302X0	Sharepoint	Block	1	Moodle
	MU922X0	Strategic Marketing	Block	1	Moodle
Elective	96102Y0	Middle School Success 101	Block	1	Moodle
	96102X0	Success 101	Block	1	Blackboard
English	10212X0/10212Y0	English I	Block	1	Moodle
	10222X0	English II	Block	1	Moodle
	10232X0	English III	Block	1	Moodle
	10242X0	English IV	Block	1	Moodle
	10312X0	Journalism	Block	1	Moodle
Health	60102X0	Health Education	9 Weeks	0.5	Moodle
Honors	33305X0/33302Y0	Anatomy and Physiology Honors	Block	1	Moodle
	33205X0/33202Y0	Biology Honors	Block	1	Moodle
	34205X0/34202Y0	Chemistry Honors	Block	1	Moodle
	42095X0/42092Y0	American History: The Founding Principles, Civics, and Economics Honors	Block	1	Moodle
	35015X0/35012Y0	Earth / Environmental Science Honors	Block	1	Moodle
	BD125X0	e-Commerce 1 Honors	Block	1	Moodle
	10215X0/10212Y0	English I Honors	Block	1	Moodle
	10225X0	English II Honors	Block	1	Moodle
	10235X0	English III Honors	Block	1	Moodle
	10245X0	English IV Honors	Block	1	Moodle
	11035X0	French III Honors	Block	1	Blackboard
	11045X0	French IV Honors	Block	1	Blackboard

	12435X0	Latin III Honors	Block	1	Blackboard
	11235X0	Mandarin Chinese Language and Culture III Honors	Block	1	Blackboard
	11245X0	Mandarin Chinese Language and Culture IV Honors	Block	1	Blackboard
	22015X0/22012Y0	Math 2 Honors	Block	1	Blackboard
	23015X0/23012Y0	Math 3 Honors	Block	1	Blackboard
	24035X0/24032Y0	Pre-Calculus Honors	Block	1	Blackboard
	44035X0	Psychology Honors***	Block	1	Moodle
	11435X0	Spanish III Honors	Block	1	Moodle
	11445X0	Spanish IV Honors	Block	1	Moodle
	43045X0/43042Y0	American History I Honors	Block	1	Moodle
	43055X0/43052Y0	American History II Honors	Block	1	Moodle
	43035X0/43032Y0	World History Honors	Block	1	Moodle
Math	24002X0/24002Y0	Advanced Functions and Modeling	Block	1	Moodle
	21032X0/21032Y0	Math 1	Block	1	Moodle
	22012X0/22012Y0	Math 2	Block	1	Blackboard
	23012X0/23012Y0	Math 3	Block	1	Blackboard
Science	33202X0/33202Y0	Biology	Block	1	Moodle
	35012X0/35012Y0	Earth / Environmental Science	Block	1	Moodle
	34102X0/34102Y0	Physical Science	Block	1	Moodle
	30202X0	Forensic Science	Block	1	Moodle
Social Studies	46012X0	African-American Studies	Block	1	Moodle
	42092X0/42092Y0	American History: The Founding Principles, Civics, and Economics	Block	1	Moodle
	96102X0	Leadership Development	Block	1	Moodle
	47002X0	Medieval Studies	Block	1	Moodle
	44032X0	Psychology***	Block	1	Moodle
	43042X0/43042Y0	American History I	Block	1	Moodle
	43052X0/43052Y0	American History II	Block	1	Moodle
	43032X0/43032Y0	World History	Block	1	Moodle
Test Prep	96022X0	SAT Prep	Block	1	Moodle
	96072X0	ACT Prep	Block	1	Moodle
World Languages	12212X0/12212Y0	Arabic I	Block	1	Blackboard
	12222X0/12222Y0	Arabic II	Block	1	Blackboard
	11812X0/11812Y0	Russian I	Block	1	Blackboard
	11822X0/11822Y0	Russian II	Block	1	Blackboard
	12412X0/12412Y0	Japanese I	Block	1	Blackboard
	12422X0/12422Y0	Japanese II	Block	1	Blackboard

11212X0/11212Y0	Latin I	Block	1	Blackboard
11222X0/11222Y0	Latin II	Block	1	Blackboard
11412X0/11412Y0	Mandarin Chinese Language and Culture I	Block	1	Blackboard
11422X0/11422Y0	Mandarin Chinese Language and Culture II	Block	1	Blackboard
12012X0/12012Y0	Spanish I	Block	1	Moodle
12022X0/12022Y0	Spanish II	Block	1	Moodle
11012X0/11012Y0	French I	Block	1	Blackboard
11022X0/11022Y0	French II	Block	1	Blackboard

NCSSM Course Offerings

SCIENCE

Honors Forensic Science (Fall & Spring semesters) PowerSchool Code 30205X0

This course focuses on the application of basic biological, chemical and physical science principles and technological practices to the purposes of justice in the study of forensic science as it relates to judicial and civil issues. The class is designed around authentic performance assessments with students working in teams to solve crimes using scientific knowledge and reasoning. Through lab work, students will apply inference and deductive reasoning to the investigation and potential solving of crimes. It involves all areas of science including biology, anatomy, chemistry, physics, and earth science with an emphasis in complex reasoning and critical thinking. In addition, students must incorporate the use of technology, communication skills, language arts, art, family and consumer science, mathematics and social studies. This course requires the ability to write clear and concise lab and investigative reports. Good writing skills are imperative. This course also deals with graphic content. Parents are asked to sign a permission slip at the beginning of the course, but students are expected to be mature when dealing with this content. Prerequisites Completion of Language Arts/ English with a grade of "A", completion of Biology I, completion of Algebra II, and completion of a Placement Exam with a score of 70 or above. NCSSM will provide a placement test to be administered by the school at the time of registration.

Grade Level: 10-12

Consumables Fees: A \$25 per student consumable materials fee will be invoiced at the start of the semester. For inquiries regarding invoices, please contact Crystal Davis at NCSSM. phone: 919-416-2640 fax: 919-416-2650 davisc@ncssm.edu

Textbook: must be provided by the school Forensic Science: The Basics, by Siegel and Mirakovitz (2nd Edition) Published by Taylor & Francis, Inc.: 2010

ISBN: 1420089021

Materials: Some equipment will be provided on loan from NCSSM; schools are responsible for materials. A list of additional needed materials will be provided. Each student must have a graphing calculator (TI-83 or TI-84) that they may take home.

Site requirements: Students must have computer access to the Internet in the classroom. Facilitator assistance will be required to set up labs. Recommended weight: Honors

Honors Forensic Science: Anthropology (Spring Semester) PowerSchool Code 30205X0

This upper level science course provides a broad overview of forensic anthropology – an applied field of biological anthropology that seeks to recover, identify, and evaluate human skeletal remains within a medico-legal context. In this course, students will learn to identify the bones of the human skeleton, as well as basic recovery techniques and crime scene investigation. We will then apply this knowledge towards the techniques used by forensic anthropologists to determine sex, age at death, ancestry, and stature; and how to estimate time since death and identification of trauma to bone. Finally, students will explore the role forensic anthropologists play in mass disaster and human rights investigations, as well as the associated ethical responsibilities that come with working with human skeletal remains. This course requires the ability to write clear and concise lab and investigative reports. Good writing skills are imperative. Prerequisites Completion of Language Arts/ English with a grade of "A", completion of Biology I, completion of Algebra II, and completion of Honors Forensic Science with a grade of "C" or above. Students must demonstrate maturity in other classes, be highly motivated, and have a strong background in science.

Grade Level: 10-12

Consumables Fees: A \$25 per student consumable materials fee will be invoiced at the start of the semester. For inquiries regarding invoices, please contact Crystal Davis at NCSSM. phone: 919-416-2640 fax: 919-416-2650 davisc@ncssm.edu

Textbook: must be provided by the school Introduction to Forensic Anthropology, by Steven N. Byers Pearson Publishing 4th edition ISBN: 97802057900128

Site requirements: Students must have computer access to the Internet in the classroom. Facilitator assistance will be required to set up labs.

Materials: Links to articles and academic journals supplied by NCSSM. Some equipment will be provided on loan from NCSSM; schools are responsible for materials. A list of additional needed materials will be provided. Each student must have a graphing calculator (TI-83 or TI-84) that they may take home.

Recommended weight: Honors

Honors Genetics and Biotechnology (Fall & Spring semesters) PowerSchool Code 33605X0

What do crime scene investigations, agriculture, medicine, conservation biology and manufacturing have in common? They have all been revolutionized by biotechnology! Almost every day we read about new developments in the rapidly changing fields of genetics and DNA-based biotechnology. In this course, students will first explore classical genetics and then move onto examining the structure and function of DNA and proteins. With state-of-the-art laboratory experiments, students will analyze DNA fingerprints from a crime scene, genetically transform bacteria and investigate their own DNA! Finally, they will survey the applications of biotechnology in many diverse fields and discuss in depth how biotechnology is changing our daily lives and our future. With the decline of traditional manufacturing in North Carolina, biotechnology is positioned to become a vital part of North Carolina's 21st century economy.

Prerequisites Completion of Biology I with a B or higher and completion of Algebra II

Grade Level: 9-12

Materials requirements: A \$25 per student consumable materials fee will be invoiced at the start of the semester. For inquiries regarding invoices, please contact Crystal Davis at NCSSM. phone: 919-416-2640 fax: 919-416-2650 davisc@ncssm.edu

Textbook: must be provided by the school Essential Genetics: A Genomics Perspective by Daniel L. Hartl Jones and Bartlett Press 4th or 5th edition

ISBN: 0763773646 | ISBN 13: 9780763773649

Site requirements: Students must have computer access to the Internet in the classroom. Facilitator assistance will be required to set up labs.

Recommended weight: Honors

Honors Physics (Fall & Spring semesters) PowerSchool Code 34305X0

This course is a hands-on, inquiry based introductory course which combines both "conceptual" and "mathematical" approaches to learning physics. The course covers the laws of mechanics and their applications. Students will learn to solve real problems by investigating real systems. Investigations will cover physics topics that are fun and engaging for the students. Students will design experiments, use accurate measuring equipment and construct and test conclusions based on accurate data. Prerequisite Completion of Algebra II with a C or higher

Grade Level: 10-12

Materials: A \$25 per student consumable materials fee will be invoiced at the start of the semester. For inquiries regarding invoices, please contact Crystal Davis at NCSSM. phone: 919-416-2640 fax: 919-416-2650 davisc@ncssm.edu Each student must have a graphing calculator (TI-83, TI-84 or TI-89) that they may take home.

Textbook: must be provided by the school Conceptual Physics, by Paul G. Hewitt Prentice Hall

ISBN-10: 0-13-364749-8 | ISBN-13: 978-0-13-364749-5

Site Requirements: Students must have computer access to Internet in classroom

Recommended weight: Honors

ENGINEERING & TECHNOLOGY

Honors Aerospace and Engineering (Fall & Spring semesters) PowerSchool Code 30205X0

In this course, students design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of space science, space life sciences, the biology of space science, principles of aeronautics, structures and materials, and systems engineering. Using 3-D design software, students work in teams utilizing hands-on activities, projects, and problems and are exposed to various situations encountered by aerospace engineers. Prerequisites Completion of Algebra II Grade

Level: 10-12

Consumables Fees: A \$25 per student consumable materials fee will be invoiced at the start of the semester. For inquiries regarding invoices, please contact Crystal Davis at NCSSM. phone: 919-416-2640 fax: 919-416-2650 davisc@ncssm.edu

Materials: Some equipment on loan from NCSSM; schools are responsible for materials. A list of additional needed materials will be provided. Some free software must be downloaded and installed on all student machines.

Site requirements: Students must have computer access to the Internet in the classroom. Facilitator assistance will be required to set up labs.

Recommended weight: Honors

Honors Forensic Material Evidence and Accident Investigation (Fall & Spring semesters) PowerSchool Code 30205X0

This course introduces students to the scientific principles and methods associated with forensic accident investigations, including structural collapses, fires, and vehicular accidents. The class provides a strong background in forensic engineering, and focuses on the analysis of materials collected from accidents and crime scenes. Through lab work and project-based simulation activities, students will apply engineering and materials science techniques to the investigation of crimes and accidents involving material failure. The course emphasizes complex reasoning and critical thinking, and additionally incorporates the use of chemistry, mathematics, technology, and the scientific method. Prerequisites Prior to taking this course, a student should have received at least a B in a Chemistry course. Due to the volume of writing in the course, students should have strong writing skills.

Grade Level: 10-12

Consumables Fees: A \$25 per student consumable materials fee will be invoiced at the start of the semester. For inquiries regarding invoices, please contact Crystal Davis at NCSSM. phone: 919-416-2640 fax: 919-416-2650 davisc@ncssm.edu

Textbook: must be provided by the school Forensic Science: An Introduction to Scientific and Investigative Techniques, edited by James and Nordby (3rd Edition) CRC Press, 2009

ISBN-13: 978-1-4200-6493-3

Materials: Some equipment will be provided on loan from NCSSM; schools are responsible for materials. A list of additional needed materials will be provided. Each student must have a graphing calculator (TI-83 or TI-84) that they may take home.

Site requirements: Students must have computer access to the Internet in the classroom. Facilitator assistance will be required to set up labs.

Recommended weight: Honors

MATHEMATICS

Foundations of Multivariable Calculus (Spring semester only) PowerSchool Code TBD

Designed for students who have completed AP Calculus BC, this course will give students a strong foundation for completing multivariable calculus at the college level. This course includes the theory and application of vector functions and partial derivatives. Topics include a vector approach to regression modeling, the Frenet-Serret equations, continuity and differentiability of functions of several variables, gradients and directional derivatives, and classic optimization problems. Numerical methods such as Newton's Method for solving non-linear systems and modeling with vector-valued functions of scalar and scalar-valued functions of a vector are included. Prerequisites or Suggested Skills Students must have successfully completed AP Calculus BC and earned a score of 4 or 5 on the AP Calculus BC Exam or received permission from the NCSSM Dean of Distance Education. NCSSM will provide a placement test to be administered by the school at the time of registration.

Grade Level: 11-12

Textbook: must be provided by the school Multivariable Calculus by Ron Larson and Bruce H. Edwards (9th edition) Cengage Learning, 2009

ISBN-13: 978-0-547-20997-5

Materials: Some equipment will be provided on loan from NCSSM; schools are responsible for materials. A list of additional needed materials will be provided. (The course is taught from the perspective of the TI-84 or 84 Plus and so these calculators are preferred; TI-83 or 83 Plus, TIInspire, or TI-89 are acceptable).

Site requirements: Students must have computer access to the Internet in the classroom.

Recommended weight: Honors

Honors Calculus/AP Calculus AB Course (two-course sequence) Honors Calculus (fall) PowerSchool Code 25005X0

This course is rich in technology and applications, and prepares students for the AP Calculus AB Exam. AP Calculus develops the student's understanding of the concepts of the Calculus (functions, graphs, limits, derivatives) and provides experience with methods

and applications. The course encourages the geometric, numerical, analytical, and verbal expression of concepts, results, and problems. Prerequisite Completion of Precalculus with an “A” and the recommendation of the math teacher. Students should have a strong background in algebra and functions, including polynomial, exponential, logarithmic, and trigonometric. Students should also have knowledge of basic graphing calculator functions ... graphing an equation, determining a Window, use of the built-in Intersect, Maximum, Minimum, Zero, & Value functions. A summer assignment will be sent to enrolled students. The completion of the summer assignment is mandatory. Schools will be asked to supply the following student information: PSAT scores- both Verbal and Mathematical and ACT scores.

Grade Level: 10-12

Material requirements: Each student must have a graphing calculator that they may take home. (The course is taught from the perspective of the TI-84 or 84 Plus and so these calculators are preferred; TI-83 or 83 Plus, TI-Inspire, or TI-89 are acceptable).

Textbook: must be provided by the school Calculus, Early Transcendentals: Single Variable, By Howard Anton, Irl Bivens, and Stephen Davis Publisher: John Wiley and Sons, Inc., 2012 10th Edition

ISBN. 978-0-470-64768-4

Site requirements: Students must have computer access to the Internet in the classroom.

Recommended weight: Honors

AP Calculus AB (spring) PowerSchool Code 25017X0

The second half of the two-course sequence, AP Calculus continues to develop the student’s understanding of these concepts of the Calculus (functions, graphs, and integrals) and provides experience with methods and applications. With the course curriculum established by The College Board, the course is to be representative of college-level mathematics. The course continues to encourage the geometric, numerical, analytical, and verbal expression of concepts, results, and problems. The semester’s work includes ongoing review of the first semester topics and preparation for the AP exam. Prerequisite: Successful completion of the NCSSM Honors Calculus course, offered in the fall semester. Schools will be asked to supply the following student information: PSAT scores- both Verbal and Mathematical and ACT scores.

Grade Level: 10-12

Material requirements: See requirements for Honors Calculus

Textbook: must be provided by the school Calculus, Early Transcendentals: Single Variable, By Howard Anton, Irl Bivens, and Stephen Davis Publisher: John Wiley and Sons, Inc., 2012 10th Edition

ISBN. 978-0-470-64768-4

Site requirements: Students must have computer access to the Internet in the classroom.

Recommended weight: AP

Honors Statistics/AP Statistics (two-course sequence) Honors Statistics (fall) PowerSchool Code 24075X0

This first part of a year-long course covers the content of a typical introductory college course in Statistics. In colleges and universities, the number of students who take a Statistics course is almost as large as the number of students who take a Calculus course. (At least one Statistics course is typically required for majors such as engineering, psychology, sociology, health science, mathematics, and business.) The first semester will provide an overview and introduction to Descriptive Statistics, and will introduce students to the major concepts and the tools for collecting, analyzing, and drawing conclusions from data. The completion of the summer assignment is mandatory. Prerequisite: Students must have completed a course beyond Algebra II with a B average or better and have strong algebra skills. They must also possess strong verbal skills as well as sufficient mathematical maturity and quantitative reasoning ability. A summer assignment will be sent to enrolled students. The completion of the summer assignment is mandatory. Schools will be asked to supply the following student information: PSAT scores- both Verbal and Mathematical and ACT scores.

Grade Level: 10-12

Material requirements: Each student must have a graphing calculator that they may take home. (The course is taught from the perspective of the TI-84 or 84 Plus and so these calculators are preferred; TI-83 or 83 Plus or TI-Inspire are acceptable)

Textbooks: must be provided by the school The Practice of Statistics Third Edition (2008), by Daren S. Starnes, The Lawrenceville School; Dan Yates, Statistics Consultant; David S. Moore, Purdue University published by Bedford Freeman and Worth,

ISBN-13: 978-0-7167-7309-2

ISBN-10: 0-7167-7309-0

*Barron’s AP Statistics, 6th Edition ISBN-10: 0764147021

Site requirements: Students must have computer access to the Internet in the classroom.

Recommended weight: Honors

AP Statistics (spring) PowerSchool Code 25117X0

The second half of the two-course sequence, AP Statistics covers the methods of Inferential Statistics, and will introduce students to the major concepts of hypothesis testing and confidence intervals. With the course curriculum established by The College Board, the course is to be representative of college-level mathematics. The semester's work includes ongoing review of the first semester topics and preparation for the AP exam. Prerequisite: Successful completion of the NCSSM Honors Statistics course, offered in the fall.

Schools will be asked to supply the following student information: PSAT scores- both Verbal and Mathematical and ACT scores.

Grade Level: 10-12

Material requirements: See Honors Statistics.

Textbooks: See Honors Statistics.

Site requirements: Students must have computer access to the Internet in the classroom.

Recommended weight: AP

HUMANITIES

Honors African American Studies (Fall semester only) PowerSchool Code 46015X0

This interdisciplinary course provides an introduction to African American history, literature, and culture. Students examine significant social, political, economic, and religious issues as well as issues of identity in the lives of African Americans from the sixteenth to the present. In addition to primary and secondary source readings, students explore texts ranging from slave narratives, folktales, and spirituals to the works of past and contemporary writers, artists, musicians, and filmmakers. Through a variety of assignments and activities, students continue to develop their skills in reading, speaking, and research, with special emphasis on the writing process.

Prerequisites None

Grade Level: 10-12

Textbooks: must be provided by the school

From Slavery to Freedom, by John Hope Franklin and Evelyn Brooks Higginbotham.

9th edition

ISBN: 978-0077407513

Site requirements: Students must have computer access to the Internet in the classroom.

Recommended weight: Honors

TIPS FOR SUCCESS

FRESHMAN YEAR:

- Develop a “Four-Year-Plan-of-Study” that meets high school graduation requirements and future career and college goals.
- Develop a “Time Management Strategy” that effectively incorporates time for schoolwork and studying, time for family and friends, time for extra-curricular and community activities, and time for yourself.
- Get involved in school and community activities.
- Explore your interests and possible careers. Talk with relative, family friends, teachers, and school counselors about career choices that interest you.
- College might seem like a long way off, but grades really do count toward college admission and 8 scholarships. Work hard and it will pay off!
- Ask for help when needed!

SOPHOMORE YEAR:

- Review your “Four-Year-Plan-of-Study” to make sure you are making successful progress and working towards high school graduation requirements and your future career and college goals.
- Maintain good study habits and time management strategies.
- Take the PLAN (the PLAN is required for all North Carolina sophomores) in November.
- Take the PSAT in October (optional).
- Continue to investigate and explore career choices.
- Get involved in school and community activities.

JUNIOR YEAR:

- Review your “Four-Year-Plan-of-Study” to make sure you are making successful progress and working towards high school graduation requirements and your future career and college goals.
- Maintain good study habits and time management strategies.
- Take the PSAT in October. This PSAT taken in the junior year is used by the National Merit Corporation to qualify students for scholarships.
- Define your career objectives.
- Tour college campuses with parents.
- Take the ACT in March (All North Carolina juniors are required to take the ACT).
- Take the SAT I (October, December, or May).
- Take the SAT II Subject Tests if required by the colleges you are interested in attending.
- Attend College Fairs.

SENIOR YEAR:

- Review your “Four-Year-Plan-of-Study” to make sure you are making successful progress and working towards high school graduation requirements and your future career and college goals.
- Retake the SAT I or ACT if needed to improve scores.
- Take the SAT II Subject Test if required by the colleges you are applying to.
- Maintain good study habits and time management strategies.
- Finalize plans for after high school including making college or career choices and completing college applications by December.
- Attend Financial Aid Workshop and complete the FAFSA in January
- Apply for scholarships noted on the scholarship bulletin board in Guidance and on the school website

It is always a good idea to create a resume of high school activities and update it each year to use for college applications, scholarships or career prospects.

**Transylvania County Schools
Four Year Plan**

Name: _____ Student #: _____

School: _____ TC Scholar _____ NC Scholar _____

Plans after high school:

Career Interest: _____ Concentration Area: _____

Freshman Year

English _____

Math _____

Science _____

Social Studies _____

Health & PE _____

Concentration _____

Elective _____

Elective _____

Sophomore Year

English _____

Math _____

Science _____

Social Studies _____

Concentration _____

Elective _____

Elective _____

Elective _____

Junior Year

English _____

Math _____

Science _____

Social Studies _____

Concentration _____

Elective _____

Elective _____

Elective _____

Senior Year

English _____

Math _____

Concentration _____

Elective _____

Elective _____

Elective _____

Elective _____

Elective _____