

# **NORTHERN BEDFORD COUNTY HIGH SCHOOL**

## **Graduation Requirements & Curriculum Descriptions**

### **Class of 2012 & 2013**

(School Year 2009-10)

#### **GRADUATION REQUIREMENTS FOR STUDENTS**

In order to graduate from Northern Bedford High School, a student will demonstrate achievement of the academic standards under Chapter 4 (relating to academic standards) and the academic standards required by the school district and specified in Northern Bedford Area School District's strategic plan.



The Northern Bedford County School District has specified the following as minimum graduation requirements for a standard high school diploma:

#### **28 total credits in grades 9-12 as follows:**

- ◆ 4 credits of English
- ◆ 7 credits of mathematics and science; minimum of 3 in each area and one of student's choice (University Prep students must schedule Chemistry and Physics in addition to the biological sciences)
- ◆ 3 credits of social studies (Government/Economics is required)
- ◆ 2 credits of arts and humanities
- ◆ 9 credits of electives including career technical education courses
- ◆ 2 credits of physical education
- ◆ .5 credits of health
- ◆ .5 credits completed graduation project

Northern Bedford students are required, at the end of grade nine, to select a major area of preparation to pursue. Students are encouraged to select an education pathway that will prepare the student for the post-secondary experience necessary to reach the desired career goal. Students choose from among University Preparation and/or Career and Technical Education (CTE) programs. More information is provided under Curriculum Selection.

*The following additional Graduation requirements are in effect:*

1. Proficiency (PSSA) Requirement - All students must demonstrate attainment of the state academic standards by scoring proficient or above on the Pennsylvania System of School Assessment (PSSA) test in all assessed areas. The PSSA test is administered during the grade 11 year and can be re-taken in the grade 12 year if necessary. Students not achieving proficiency in this way must complete a remediation plan and demonstrate proficiency through local assessment in any deficient area(s).
2. Graduation Project - Seniors are required to complete a senior or graduation project as follows:
  - a. Project proposal must be submitted by the announced deadline during the second semester of the junior year. The project must be in addition to any assignment or requirement for any class.

- b. The project must include research, a “product”, a three page written report, and a five minute oral presentation. In the event the student chooses a research paper for the project, it must be a minimum of 15 pages in length.
- c. A log or journal signed by the advisor must be submitted, documenting at least 40 hours of work on the project.
- d. The project will be submitted and presented for evaluation in the senior year. Credit for the graduation project will be granted upon earning a Pass on all components of the project.

3. Career Portfolio Requirements - According to the Pennsylvania Department of Education, the Career Portfolio is a component of the Pennsylvania Academic Standards for Career Education and Work Standards. The purpose of the Career Portfolio is to guide students through the career development process. Students will be able to make more informed decisions through self-assessment, career exploration, education planning, and the development of job search and employability skills. Therefore, students are required to maintain a Career Portfolio. To be eligible for grade promotion and eventually graduation, students must complete the career portfolio requirements during grades 8 through 12.

Students are advised to continually monitor their academic progress to be sure that these graduation requirements are met. Only those students meeting all the requirements for a diploma will be permitted to participate in the Commencement Program.

Students who have attended school and are admitted to the senior class but who fail to meet the above requirements will be issued a Certificate of Achievement in lieu of the diploma. This certificate may be returned for a diploma upon meeting the above stated requirements within three (3) years of the date of the certificate.

**GRADE LEVEL PROMOTION REQUIREMENTS** – To be promoted on a yearly basis the requirements are as follows:

<b><u>10<sup>th</sup> Grade</u></b>	<b><u>11<sup>th</sup> Grade</u></b>	<b><u>12<sup>th</sup> Grade</u></b>
7 Credits must be earned by the end of 9 <sup>th</sup> grade.	14 Credits must be earned by the end of 10 <sup>th</sup> grade.	21 Credits must be earned by the end of 11 <sup>th</sup> grade.

**CURRICULUM SELECTION**

Northern Bedford students are required, at the end of grade nine, to select a major area of preparation to pursue. Students choose from among University Preparation and/or Career and Technical Education (CTE) programs.

The *University Preparation* pathway prepares students for the traditional two-year or four-year college/university. Preparation is for careers that require the Associate, Bachelor, or higher professional degree.

The *Career and Technical Education* pathway prepares students for employment after high school and/or continued education at a post-secondary school or college. Students can select from the following

CTE programs: Agriculture, Automotive Technology, Building Construction Occupations, Business, and Horticulture. To be considered a full-time CTE student, students must schedule three periods a day and continue in a program for three years. CTE students are required to maintain membership in a related co-curricular club as an integral part of their academic program, which can include paying necessary dues and participating in activities of the organization.

All students are further encouraged to elect courses from curriculum areas other than their major area. University Prep students may schedule one or more of the CTE classes as electives. CTE selections are also available from the Bedford County Technical Center on a space-available basis. These curriculum options are described later in the course description guide. The guidance counselor will contact all grade nine students and their parents regarding the selection of senior high curriculum. The programs are non-discriminatory and are open to all students regardless of race, sex, or handicapping conditions.

**Career and Technical Education (CTE) STUDENT SCHEDULE**  
**Schedule 8 of 9 periods**

9 <sup>th</sup>		10 <sup>th</sup>		11 <sup>th</sup>		12 <sup>th</sup>	
Class	Cre.	Class	Cre.	Class	Cre.	Class	Cre.
English	1	English	1	English	1	English	1
Math	1	Math	1	Math	1	Math	2 or 3
Science	1	Science	1	Science	1	Science	
Soc. Studies	1	Soc. Studies	1	Soc. Studies	1	Soc. Studies	
Reading or W.L.	1	PE/ Health	.5/.5	PE/ Comp. Apps	.5/.5	PE	.5
PE/ Art/Music**	.5/ .25/.25	CTE	1	CTE	1	CTE	1
CP/Dr. Ed	.25/.25	CTE	1	CTE	1	CTE	1
T Ed / C Lit Ag	.5/.5 1	CTE	1	CTE	1	CTE	1
Elective	.5 / 1					Grad Project	.5

**University Preparation (UP) STUDENT SCHEDULE**  
**(2009-10)–Schedule 8 of 9 periods**

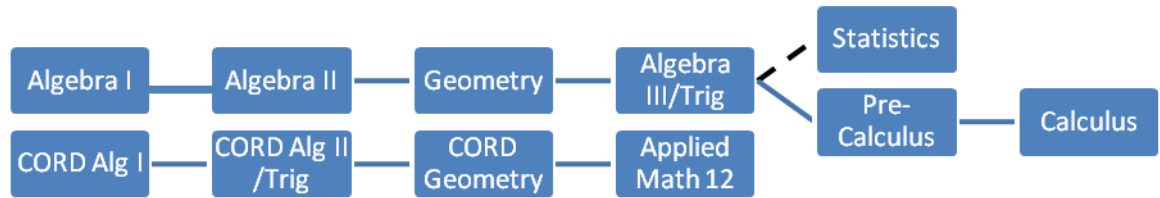
9 <sup>th</sup>		10 <sup>th</sup>		11 <sup>th</sup>		12 <sup>th</sup>	
Class	Credit	Class	Credit	Class	Credit	Class	Credit
Math	1	Math	1	Math	1	Math	1
English	1	English	1	English	1	English	1
Science	1	Science	1.5	Science	1.5	Science	1 or 1.5
Soc. Studies	1	Soc. Studies	1	Soc. Studies	1	Soc. Studies	1
Reading or W.L.*	1	PE/ Health	.5 / .5	PE/ Comp. Apps	.5 / .5	PE	.5
PE/ Art/Music**	.5/ .25/.25	W. L	1	Elective		Elective	
CP/Dr.Ed	.25/.25	Elective		Elective		Elective	
T Ed / C Lit Ag	.5/.5 1	Elective		Elective		Elective	
Elective	.5 / 1	Elective		Elective		Grad Project	.5

\*Students must complete a minimum of two consecutive years of a World Language

\*Students in band will be scheduled for Instrumental .5

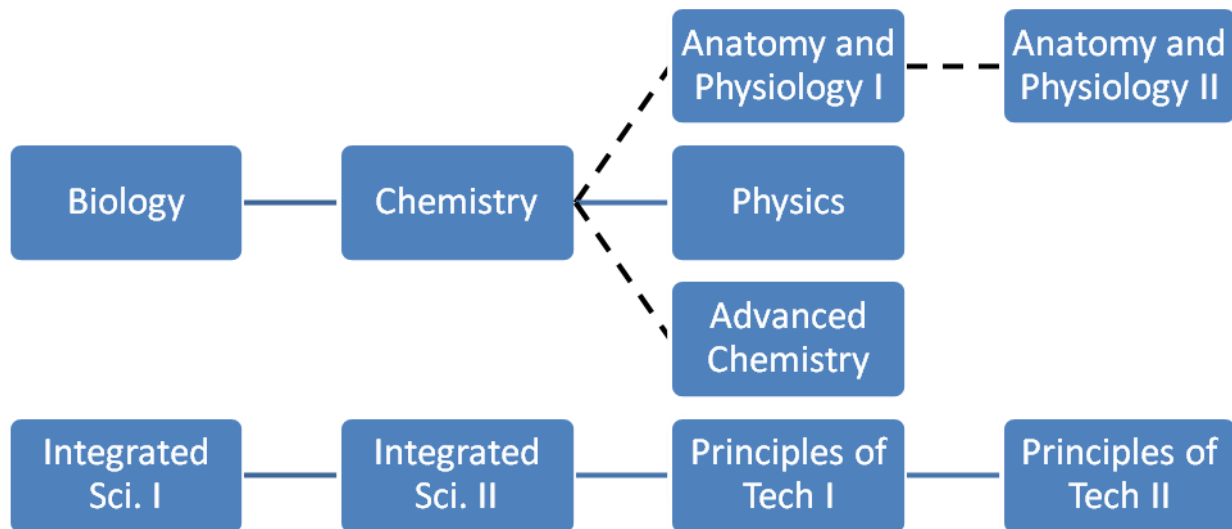
# Academic Scope and Sequence

## Mathematics Scope and Sequence



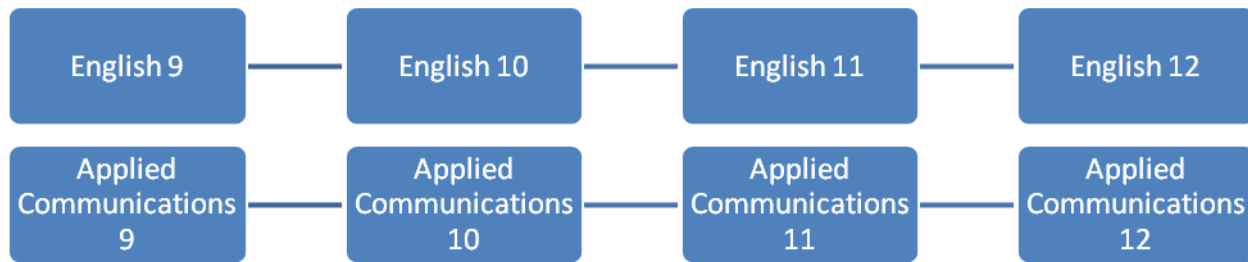
- Statistics may be scheduled during the senior year in place of Pre-Calculus or Calculus for students enrolling in a human service field in college. It may also be schedule concurrently with Pre-Calculus and/or Calculus.

## Science Scope and Sequence



- Students may take Anatomy and Physiology I during their junior year in addition to Physics or during the senior year. (Prerequisites: Biology and Chemistry.)
- Students may also take Anatomy and Physiology II during their senior after successfully completing Anatomy and Physiology I.
- Students may also take Advanced Chemistry during their junior year in addition to Physics or during their senior year after successfully completing chemistry.

## English Scope and Sequence



- Students may take Journalism or Yearbook as electives beginning in Grade 9.
- Students achieving advanced or proficient on the 8<sup>th</sup> Grade PSSA Reading exam will schedule a World Language.
- Students not achieving advanced or proficient on the 8<sup>th</sup> Grade PSSA Reading exam will be scheduled for Reading 9.

## Social Studies Scope and Sequence



- Government/Economics is a graduation requirement.
- Students may schedule Current Issues during their junior or senior year as an elective.

# COURSE DESCRIPTIONS

## Mathematics

*Algebra I* strengthens student understanding and provides tools students need to succeed—from the first day the students learn the vocabulary of algebra until the day they take the final. Problem solving is introduced early and is integrated throughout. Reasoning skills such as analyzing information, making conjectures, and giving convincing arguments are developed throughout the course. The following concepts will be covered: understanding of variables and equations, working with rational numbers, solving equations and problems, operations with polynomials, data collection and interpretation, writing ratios and solving proportions, graphing linear equations, and writing equations of lines.

Pre-requisites: Pre–Algebra

Number of Credits: 1

*Algebra II* is a course that continues the ideas and concepts of Algebra I. Students will review the concepts: real numbers and their properties, equations in one variable and graphing linear equations. Students will learn new concepts such as: inequalities, absolute values, solving systems of linear equations, monomials, polynomials, factoring, radicals, the quadratic function, and probability and statistics.

Pre-requisites: C average in Algebra I

Number of Credits: 1

*CORD Algebra I* continues the ideas presented in CORD Math. The course will again emphasize workplace applications by using integrated hands-on laboratory activities, cooperative learning experiences, and text materials. Problem solving is introduced early and is incorporated throughout the entire course. Students will study basic algebra concepts such as: signed numbers, absolute values, scientific notation, use of formulas, solving linear equations, graphing linear equations, and probability.

Pre-requisites: Cord Math

Number of Credits: 1

## Science

*Biology* is designed for the student who possibly plans to further their education in a science related field. The course presents topics in the context of ecology and human biology after a development in basic biological concepts. Students will study the classifications of organisms, the cell and cellular reproduction, animal and plant life processes, ecology, genetics, adaptations and speciation, and microorganisms. The course incorporates hands-on laboratory activities to reinforce biological concepts.

Pre-requisites: none

Number of Credits: 1

*Integrated Science I* prepares the ninth grade student for success in the advanced science courses that are required in the upper grades. Course material is drawn from Biology, Chemistry, Physical Science, and Earth Science. The intent of the course is to maximize student involvement through laboratory activities combined with a rigorous lecture component to increase the acquisition of scientific concepts.

Pre-requisites: none

Number of Credits: 1

## English

*English 9* will include instruction in writing, reading, vocabulary, grammar, and speaking. The class will emphasize improvement in writing mechanics, style, and structure. The class will also challenge the students to become better readers of grade level and above grade level text, and to better comprehend and analyze text.

Pre-requisites: None

Number of Credits: 1

*Reading 9* involves reading various types of literature, including short stories, poems, novels, and nonfiction works. The course focuses on improving reading skills, as well as reading for enjoyment and information. The class also familiarizes students with various literary terms.

Pre-requisites: None

Number of Credits: 1

## Social Studies

*Pennsylvania History*—This Grade 9 course prepares students to understand the history of Pennsylvania. The students shall receive a brief overview of geography, the heritage, the agriculture, the businesses, the culture, and government of Pennsylvania. The students are required to complete several public speaking assignments. The students will develop an understanding of where they are located and the role they will play as a citizen within the county, state, country, and world.

Pre-requisites: None

Number of Credits: 1

## World Language

*Spanish I* incorporates grammar and vocabulary reviews of basic information in order to continue higher-level lessons on solid foundations. An emphasis will be made to include new material in the context of sentences and dialogues. Extensive vocabulary and grammar topics, including subjunctive tense and imperative tense, as well as object pronouns in conjunction with these tenses, will be part of higher-level material. All material will be practiced orally and/or in writing. Positive class contributions, especially oral participation, will receive a test score grade. The text will serve as a supplementary source of enrichment and/or extra credit.

Pre-requisites: None

Number of Credits: 1

*German I*—This first year course introduces students to the German language and culture. The emphasis in the course is on communication, and the teaching method is student-centered. We use motions to reinforce new vocabulary words that are taught in the context of mini-stories. Students engage in conversations about topics such as food, clothing, places in town, and leisure activities and gain an understanding of different German cultural practices.

Pre-requisites: None

Number of Credits: 1



## Fine Arts

**Art 9** provides the student with the opportunity of self-expression through the visual arts with emphasis on problem solving skills to execute various projects in different mediums. Students will have hands on experience with both two-dimensional and three-dimensional projects. Basic art skills introduced during the middle school years will be expanded upon. Historical perspectives of art will be discussed in depth. A higher comprehension and application of art elements and principles is expected. Group discussions and writing assignments will continue to focus on improving the student's ability to critically evaluate an artist, art piece, or a style or period of art in history using correct art terminology.

Pre-requisites: None

Number of Credits: .25

**Chorus** is open to any student upon recommendation of the choral director. This recommendation is based on either individual auditions or references from the Junior High Choral Director. There is a wide variety of musical styles and challenging choral literature to be rehearsed. The Senior High Chorus presents a Christmas Concert and either a concert, variety show, or musical in the spring of each year.

Pre-requisites: None

Number of Credits: .5

**Band** is open to students who play a wind or percussion instrument and successfully completes an audition or is recommended by the Junior High Band director. The band performs as a marching unit as well as a concert ensemble. Opportunity is also given to students who possess the ability to perform with the band front during the marching season. Emphasis is placed on music playing ability, musicianship, and marching.

Pre-requisites: None

Number of Credits: .5

**Band Front** is available to any students in grades 9-12. Placement in Band Front is based on a tryout that takes place in the spring. Band Front is a co-curricular course which meets during band period and several evenings in the fall. The Band Front performs with the marching band for all parades and field shows from June through November. Students who are in band must have permission from the band director to tryout for Band Front.

Pre-requisites: Tryout

Number of Credits: .25

**Intro to Graphic Design**—Using the Elements and Principles of Design learned in general art classes, students will explore the basics of graphic design using Adobe Photoshop and InDesign™. Projects will include fine art applications as well as commercial applications. Students need not own a camera to participate in the course.

Pre-requisites: None

Number of Credits: 1

**Instrumental 9** is required for all students who are also enrolled in band in lieu of Music 9 or Art 9. Students will continue to develop pitch, rhythm, tone, articulation and musicianship on their band instrument. Opportunities may be available for small ensembles.

Pre-requisites: None

Number of Credits: .5

**Music 9** provides students with the opportunity to study the history of the Baroque and Classical periods of music. Included is a study of the composers Bach, Handel, Mozart, Beethoven, and Haydn. Also included in the 9<sup>th</sup> grade music class is a continuation of guitar playing that the students have been

developing in the 7<sup>th</sup> and 8<sup>th</sup> grades. This unit enhances the student's ability to read music and develop a life-long musical skill. "Music Alive" Magazine is a monthly publication that is used periodically to expose students to various music topics and current music trends. This course is designed to meet the standards that have been developed by the Pennsylvania Department of Education.

Pre-requisites: None

Number of Credits: .25

## **Electives**

**Career Planning** is designed to actively involve the student in the planning and goal setting of his/her career. The main areas discussed are: (1) career self-awareness, (2) the world of work, (3) career research and exploration, and (4) job seeking skills. Each student will complete an individual career research project and have the opportunity to job shadow in a career area of his/her choice. Students are scheduled for Career Planning in grades 9 or grade 10.

Pre-requisites: None

Number of Credits: .25

**Computer Literacy** is a one-semester course designed to teach students an integrated program—Microsoft Office and Windows software. This course will prepare students to work with a word processor, a presentation program, electronic mail, Internet, and desktop creation. Emphasis is placed on using hands-on computer skills for creating letters, reports, Internet research, budgets, presentations, electronic communications, and desktops. It prepares students to interact with computer programs and utilize modern technology.

Pre-requisites: Required of 9<sup>th</sup> Grade Students

Number of Credits: .5

**Driver Education** prepares the student to take and pass the permit test and the driver's license test. An emphasis will also be driving responsibly in order to ensure the safety of the driver, passengers, and others who share the use of our roads.

Pre-requisites: None

Number of Credits: .25

**Guitar Elective** meets daily and is open to students who are interested in learning the basic skills of guitar playing or who would like to improve the skills they already possess. The class is designed as an independent study so students of all levels are welcome. Students have the option of using their own guitar or they may use one of the school owned instruments.

Pre-requisites: None

Number of Credits: .5 or 1

**Journalism** includes instruction in writing news articles: features, sports, editorials, and human interest. Students will also learn to lay out a newspaper page, to use digital photographs to enhance the quality of the design, and to proofread and edit the work of other reporters. This course is taught with hands on experience with The Northern Lite, the school newspaper.

Pre-requisites: None

Number of Credits: .5 or 1

**Tech Ed 9**—Ninth grade Technology Education meets 1 period daily for 1 semester. Students will be given a broad background in all technological areas and will have the opportunity to expand their knowledge base in an area and/or areas of their choosing.

Pre-requisites: None

Number of Credits: .5

**Family Consumer Science**-The ninth grade Family Consumer Science course meets 1 period daily for either 1 semester or for the year. Students will continue to build their skills and knowledge in areas of foods, cooking, basic consumerism, and related areas of family consumer science.

Pre-requisites: None

Number of Credits: .5 or 1

**Yearbook** provides students with a “hands on” experience in complete yearbook production from fund raising to finished product. Students will work on the actual NBC yearbook *Pawprints* as well as various assignments that will develop skills needed for publication production. Topics to be covered are: business management, organizational skills, photojournalism, content development (Includes thematic development, effective captioning & headlines, journalistic writing), marketing, advertising, page design and layout.

Pre-requisites: None

Number of Credits: .5 or 1

**Agricultural Science 9** is the introductory course for the agriculture department and is open to 9<sup>th</sup> grade students. The class may be scheduled as an elective or as the first course in an agriculture program. Students will study introductory units to plant science, animal science, natural resources, agricultural mechanics, agribusiness and technology. Students will develop leadership skills through co-curricular FFA activities. Individualized learning will be encouraged through the development of individual projects (SAEs). Instruction will take place in the agriculture and horticulture classrooms, greenhouse agriculture mechanics laboratory, computer laboratory, school grounds and community field trips.

Pre-requisites: None

Number of Credits: 1

## **Health and Physical Education**

**Physical Education** is designed to help the students develop physically, mentally, and socially. Emphasis is on lifetime and co-educational activities. The course activities vary from season to season. The activities will help the student become aware of the avenues available to them to achieve physical fitness and to reduce daily stress. This course will play a role in enabling the student to be an efficient, happy and contributing member of society.

Pre-requisites: None

Number of Credits: .5

**The following Career and Technology Education (CTE) programs are available to you beginning with grade 10. Information on these courses is being provided to help you begin understanding what options are open to you in the upcoming school years.**

## **Career and Technology Education**

The Northern Bedford County School District has a long-standing tradition of offering quality Career and Technical Education (CTE) programs on campus. Currently we offer complete CTE programs in Agriculture, Automotive Technology, Building Construction Occupations, Business—Accounting, Business—Administrative Assistant, Business—General Office, and Horticulture. To be considered a full-time CTE student, students must schedule three periods a day and continue in a program for three years. University Prep students may schedule one or more of the CTE classes as electives.

## **Agriculture**

*Agriculture* is a CTE program that prepares students for jobs in the area of agriculture in fields such as agricultural production, business, mechanics and others. It also serves as a learning base for students continuing their agricultural studies at a college, university, or technical school. The courses are:

**Agricultural Science 9** is the introductory course for the agriculture department and is open to 9<sup>th</sup> grade students. The class may be scheduled as an elective or as the first course in an agriculture program. Students will study introductory units to plant science, animal science, natural resources, agricultural mechanics, agribusiness and technology. Students will develop leadership skills through co-curricular FFA activities. Individualized learning will be encouraged through the development of individual projects (SAEs). Instruction will take place in the agriculture and horticulture classrooms, greenhouse agriculture mechanics laboratory, computer laboratory, school grounds and community field trips.

Pre-requisites: None

Number of Credits: 1

**Agricultural Science I** is a broad-based agriculture course that may be scheduled for one or two periods per day; as an elective, or as the curriculum major. Students will study units from plant science, animal science, agricultural communications, agribusiness, agricultural mechanics, natural resources and technology. Students will develop leadership skills through co-curricular FFA activities. Individualized learning and experience will be encouraged through the development of SAEs (Supervised Agricultural Experience). Instruction will take place in the agriculture and horticulture classrooms, agriculture mechanics lab, computer lab, school labs, and on community field trips. Students will also be schedule for a Leadership/FFA course.

Pre-requisites: Agricultural Science 9

Number of Credits: 3

**Agricultural Science II/III**—Agricultural Science II/III focuses on the science and business of agriculture today. The course is offered by the agricultural department and is open to students in grades 11 and 12. It is recommended that students complete Agricultural Science 9 or Agriculture Science I before enrolling in this course. Students will study topics including animal science and production, plant science and production, soil science, biotechnology, natural recourses, leadership

and career development, agribusiness, and food science. Students will develop leadership skills through co-curricular FFA activities. Individualized learning and experience will be encouraged through the development of SAEs (Supervised Agricultural Experience). Instruction will take place in the agriculture and horticulture classrooms, agriculture mechanics lab, computer lab, school labs, and on community field trips. Students will also be scheduled for a Leadership/FFA course.

Pre-requisites: Agricultural Science I

Number of Credits: 3

## **Automotive Technology**

*Automotive Technology* is a career and technical education program that prepares students for entry level positions in the automotive repair industry. The courses are:

**Auto Technology I** trains students in the basics of automotive mechanics. Emphasis is placed on developing entry-level occupational skills, awareness of the dignity of work, current labor market skills and preparation for post secondary education in the mechanics field while working on live equipment in a “hands on” approach to learning. Course work includes but not limited to the following: shop safety, tool identification, reading for information, basic engine systems, engine rebuilding, micrometer use, oxy-acetylene welding, lubrication systems, cooling systems, basic fuel delivery systems, and exhaust systems. Students will also be scheduled for a Leadership/Skills USA course.

Pre-requisites: None

Number of Credits: 3

**Auto Technology II** trains students in the basics of automotive mechanics. Emphasis is placed on developing entry-level occupational skills, awareness of the dignity of work, current labor market skills, and preparation for post high school education in the mechanics field while working on live equipment in a “hands on” approach to learning. Course work includes but not limited to the following: Tool review, reading for information, fasteners, basic hydraulic principles, brake systems, wheels, tires, steering, suspension, alignment, fuels, emissions, pollution controls, basic fuel and air supply systems, fuel injection, advanced welding and cutting including arc, oxy-acetylene, MIG and plasma cutting. Students will also be scheduled for Electronics (1 credit).

Pre-requisites: Students must have passed Auto Technology I

Number of Credits: 2

**Auto Technology III** trains students in the basics of automotive mechanics. Emphasis is placed on developing entry-level occupational skills, awareness of The dignity of work, current labor market skills, and preparation for post high school education In the mechanics field while working on live equipment in a “hands on” learning approach. Course work includes but not limited to the following: differentials, transmissions, heating, ventilation, air conditioning, starting and charging, ignition systems, fuel injection ,computerized engine controls ,and electronic diagnostic tool use. Students will also be scheduled for a Leadership/Skills USA course.

Pre-requisites: Students must have passed Auto Technology I and II

Number of Credits: 3

**Automotive Electronics** trains students in basic automotive electronics. Emphasis is placed on developing entry-level occupational skills, awareness or the dignity of work, current labor market skills and preparation for post secondary education in the automotive field while working in a “hands on “ approach to learning. Course work includes but not limited to the following: shop safety, basics of electrical systems, basic electronics, batteries theory and service, electrical repair techniques,

understanding wiring diagrams, lighting systems, starting systems, charging systems, electrical instruments and accessories, and ignition system operation and service.

Pre-requisites: None

Number of Credits: 1

**Auto Technology Elective**—is designed to give students basic knowledge of automotive mechanics and vehicle function. The student will be placed with a more experienced group to learn basic vehicle function. Students must be approved for entry by the instructor and guidance office.

Pre-requisites: Prior approval

Number of Credits: 1

**Automotive Assistant**— is only available to those students who have completed Auto I and II and are currently enrolled in Auto III. The student must have an A average in Auto II. The course meets one period per day the entire year.

Pre-requisites: Completed Auto II with an A average and recommended by the instructor.

Number of Credits: 1

## **Building Construction Occupations**

*Building Construction Occupations* is a CTE program that prepares students for entry-level positions in the construction industry. This is a three-year program with courses rotating on a three-year cycle. The courses are:

**Cabinetmaking** is designed to give students a basic knowledge in the area of cabinetmaking and kitchen design. This would include, but is not limited to, wood identification, gluing, cabinet assembly, door and drawer construction, sanding, and finishing. Students will design and build various cabinetmaking projects throughout the year. This knowledge will prepare the student for an entry level position in the field or for further education in a post secondary program. The course meets two periods per day for a total of 240 hours and carries two building construction occupation credits. Students will also be scheduled for a Leadership/Skills USA course.

Pre-requisites: None

Number of Credits: 3

**Masonry/Plumbing/Electricity** is designed to give students a basic knowledge in the construction of a residential structure. This would include, but is not limited to, excavation, footers, drains, waterproofing, blocks, brickwork, concrete, wells, septic systems, waste lines, water lines, and fixture installation. Students will also be taught electrical theory and do hands on wiring projects of circuits found in a typical home. This knowledge will prepare the student for an entry-level position in this field or for further education in a post secondary program. The course meets two periods per day for a total of 240 hours and carries two building construction occupation credits.

Students will also be scheduled for a Leadership/Skills USA course.

Pre-requisites: None

Number of Credits: 3

**Carpentry** is designed to give students a basic knowledge in the construction of a residential structure. This would include, but is not limited to, floor framing, wall framing, roof framing, insulation, drywall, painting, trim work, and exterior finish. This knowledge will prepare the student for an entry-level position in this field or for further education in a post secondary program. The course meets two periods per day for a total of 240 hours and carries two building construction occupation credits. Students will also be scheduled for a Leadership/Skills USA course.

Pre-requisites: None

Number of Credits: 3

**AutoCAD**—This is a course designed to introduce students to the basics of the AutoCAD program as it pertains to the building industry. Upon completion of this course, students will have mastered the commands in the AutoCAD program and have completed a set of prints for a residential structure. Students will also schedule this their senior year as part of their three period requirement for BCO.  
 Pre-requisites: None Number of Credits: 1

**Building Construction Cabinetmaking Elective** is designed to give students a basic knowledge in the area of cabinetmaking and kitchen design. This would include, but is not limited to, wood identification, gluing, cabinet assembly, door and drawer construction, sanding, and finishing. Students will design and build various cabinetmaking projects throughout the year. This knowledge will prepare the student for an entry level position in the field or for further education in a post secondary program.  
 Pre-requisites: None Number of Credits: 1

**Building Construction Masonry/Plumbing/Electricity Elective** is designed to give students a basic knowledge in the construction of a residential structure. This would include, but is not limited to, excavation, footers, drains, waterproofing, blocks, brickwork, concrete, wells, septic systems, waste lines, water lines, and fixture installation. Students will also be taught electrical theory and do hands on wiring projects of circuits found in a typical home. This knowledge will prepare the student for an entry-level position in this field or for further education in a post secondary program.  
 Pre-requisites: None Number of Credits: 1

**Building Construction Carpentry Elective** is designed to give students a basic knowledge in the construction of a residential structure. This would include, but is not limited to, floor framing, wall framing, roof framing, insulation, drywall, painting, trim work, and exterior finish. This knowledge will prepare the student for an entry-level position in this field or for further education in a post secondary program.  
 Pre-requisites: None Number of Credits: 1

**Business**

*Business* is a CTE program that prepares students for entry-level business related positions immediately after graduation or to further their education at business schools, technical schools, colleges, or to enter the military services. The two pathways are:

	Accounting	Administrative Assistant/Office
Grade 10	Business Practicum Accounting I Intro to Office (Word)	Business Practicum Accounting I Intro to Office (Word)
Grade 11	Microsoft Excel Accounting II Business Management	Microsoft Excel Intermediate Office Business Management
Grade 12	Business Law & Ethics Accounting III Entrepreneurship/Leadership	Business Law & Ethics Advanced Office Entrepreneurship/Leadership

The courses are:

**Accounting I** is a course designed to prepare students for business employment and for advanced study in this discipline. In this course, a system of basic accounting for proprietorships and partnerships is presented. Students are introduced to basic accounting terminology, the accounting cycle, financial statements, payroll records, and cash control/checking. The students will also complete a business accounting simulation project that covers a complete accounting cycle for a service business organized as a proprietorship. The course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: None

Number of Credits: 1

**Accounting II** is a course designed to be a continuation of general accounting principles and prepare students for business employment and post high school study in this discipline. Topics include expanded entries for a merchandising business, financial reports, computerized income taxes, and inventory control. Students complete a simulation project for a merchandising business organized as a partnership that uses source documents for the business transactions. The course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: Accounting I

Number of Credits: 1

**Accounting III** is a course designed to be a continuation of the Accounting II discipline. This course gets into more detail regarding corporate accounting, accruals, and depreciation methods. Federal Taxes and the entire corporate accounting cycle are examined and there is an emphasis on accounting career exploration. There is also a computer component to Accounting III using Quickbooks and business simulations in Quickbooks. The course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: Accounting I and II

Number of Credits: 1

**Intro to Office** is a course designed to prepare students to key simple documents, develop touch techniques, and build speed and accuracy. This course will prepare students to work with Word, a word processor in the Microsoft Office 2007 Suite. Emphasis is placed on creating letters, tables, reports, charts, primary and secondary documents, merges, and labels. This course also serves as a firm foundation for other computer courses and prepares students for initial employment in the job market. It course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: None

Number of Credits: 1

**Intermediate Office** is a course designed to prepare students for securing jobs requiring computer skills in the business field of employment. This course will prepare students to work with the Powerpoint, Publisher, Outlook, and Calendar programs within the Microsoft Office 2007 Suite. Emphasis is placed on appealing presentations, flyers, brochures, electronic communications, and calendar scheduling. The skills obtained will lead to MCAS certification. It prepares students to interact with individuals and computer programs and to utilize modern technology. This course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: Computer Literacy or Intro to Office

Number of Credits: 1

**Advanced Office** is a course designed to be a continuation of the Office 2007 discipline to prepare students for securing jobs requiring computer skills in the field of employment. This course will prepare students to work with Access and integrate documents among programs in the Microsoft



Office 2007 Suite. The accumulation of Office 2007 skills will lead to MCAS certification. Emphasis is placed on databases, creating reports and forms, multi-table forms, macros, switchboards, pivot tables/charts, and queries. It prepares students to interact with computer programs and to utilize modern technology. This course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: Intermediate Office

Number of Credits: 1

**Microsoft Excel** is a course designed to prepare students for securing jobs requiring computer spreadsheet skills in the field of employment. This course will prepare students to work with Excel, an electronic spreadsheet in the Microsoft Office 2007 Suite. Emphasis is placed on creating spreadsheets and templates; formatting worksheets; working with charts, tables, formulas, functions, and graphics; and entering, managing, and analyzing data in order to make profitable economic decisions. It prepares students to interact with computer programs and to utilize modern technology. This course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: Computer Literacy or Intro to Office

Number of Credits: 1

**Business Practicum** is designed to introduce students to the world of business and to help prepare them for a more meaningful and beneficial interaction with business. It helps students understand what the role of business is in our society and what their relationship is to business. It prepares students to deal with and become part of the contemporary business world or interact with business utilizing modern technology. The course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: None

Number of Credits: 1

**Business Management** is a course designed to provide students with the understanding of how business organizations work and are managed, along with developing the needed technical knowledge and skills used in business. The major emphasis is to prepare students with business knowledge, skills, and attitudes needed to become a productive citizen in a highly ever-changing business society. This course will also prepare students with personal financing skills. The course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: None

Number of Credits: 1

**Business Law & Ethics** is a course designed to provide students with the understanding of how our laws were created and evolved historically, as well as, a more specific study of law as it applies to the business world. The course also incorporates ethical decision making in the workplace. Some of the major topics that are a part of the course include: Contracts (buying, selling, and employment), laws involving credit, business ethics, property laws, negotiable instruments, and insurance and business organization. The course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: None

Number of Credits: 1

**Entrepreneurship/Leadership** is a course designed to introduce students to the principles of entrepreneurship and leadership involved with starting a new business. It prepares students for leadership roles in their community, as well as, their career to create a positive workplace environment for all employees. Some of the major topics in this course include: develop a business plan; market research; budgeting, financing, and managing a new business; selecting a business location, and developing leadership skills. The course provides a direct impact on the success of a

person's career in the real world and what is expected of them in the workplace or as an entrepreneur. The course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: None

Number of Credits: 1

**WebPage Design** is a course designed to give students a background in webpage building and design. Students learn site planning for various types of webpages and html coding is used to build webpages. Emphasis is placed on basic coding, but some basic use of flash and cascading stylesheets are utilized in the course. The Dreamweaver Software package is used during the second semester of the course to build webpages. The course meets one period per day for a total of 120 hours and carries one credit.

Pre-requisites: None

Number of Credits: 1

## Horticulture

*Horticulture* is a CTE program that prepares students for jobs in the horticulture industry. This is a three year program. The courses are:

**Horticulture I** is the introductory course for the horticulture department and is open to students in grades 10-12. The class is the first course in the horticulture program. This course was developed to provide students with an interest in horticultural science an opportunity to study the principles of botany and apply those principles to the growth, reproduction and utilization of plants for personal or career interest. Students will study introductory units to horticulture including plant science, greenhouse crop production, floral design, landscaping, selling and horticultural careers. Students will develop leadership skills through inter-curricular FFA and horticulture club activities. Individualized learning will be encouraged through the development of individualized projects (SAEs). Instruction will take place in the horticulture classroom, greenhouse, agriculture mechanics laboratory, computer laboratory, school grounds and community field trips. Students will also schedule a Leadership/FFA course.

Pre-requisites: 9<sup>th</sup> grade Ag. Recommended

Number of Credits: 3

**Horticulture II**—Horticulture II is the second course for the horticulture program students and is open to students in grades 11 and 12. The course is designed to provide students with an interest in horticulture an opportunity to increase their skills in horticulture and continue their study of horticulture science. The focus of the class will be developing skills and knowledge related to floriculture with units in floral design and floral crop production. Sales and marketing related to floriculture will also be studied. Students will develop leadership skills through inter-curricular FFA and horticulture club activities. Individualized learning will be encouraged through the development of individualized projects (SAEs). Instruction will take place in the horticulture classroom, greenhouse, agriculture mechanics laboratory, computer laboratory, school grounds and community field trips. Students will also schedule a Leadership/FFA course.

Pre-requisites: Horticulture I

Number of Credits: 3

**Horticulture III**—Horticulture III is the third course for the horticulture program students and is open to students in grade 12. The course is designed to provide students with an interest in horticulture an opportunity to increase their skills in horticulture and continue their study of horticulture science. The focus of the class will be developing skills and knowledge related to

landscaping. Students will study units about landscape design, installation and maintenance. Selling and marketing landscape services will also be included. Students will develop leadership skills through inter-curricular FFA and horticulture club activities. Individualized learning will be encouraged through the development of individualized projects (SAEs). Instruction will take place in the horticulture classroom, greenhouse, agriculture mechanics laboratory, computer laboratory, school grounds and community field trips. Students will also schedule a Leadership/FFA course.

Pre-requisites: Horticulture II

Number of Credits: 3

**Horticulture I Elective** is the introductory elective course for the horticulture department and is open to students in grades 10-12. The elective class meets for one period and carries one credit. This course was developed to provide students with an interest in horticultural science an opportunity to study the principles of botany and apply those principles to the growth, reproduction and utilization of plants for personal or career interest. Students will study introductory units to horticulture including plant science, greenhouse crop production, floral design, landscaping, selling and horticultural careers. Students will develop leadership skills through inter-curricular FFA and horticulture club activities. Individualized learning will be encouraged through the development of individualized projects (SAEs). Instruction will take place in the horticulture classroom, greenhouse, agriculture mechanics laboratory, computer laboratory, school grounds and community field trips. Elective students will not do as many hands on activities as double period program students.

Pre-requisites: 9<sup>th</sup> grade Ag. Recommended

Number of Credits: 1

**Horticulture II Elective**—Horticulture II is the second elective course for the horticulture department and is open to students in grades 11 and 12. The course is designed to provide students with an interest in horticulture an opportunity to increase their skills in horticulture and continue their study of horticulture science. The focus of the class will be developing skills and knowledge related to floriculture with units in floral design and floral crop production. Sales and marketing related to floriculture will also be studied. Students will develop leadership skills through inter-curricular FFA and horticulture club activities. Individualized learning will be encouraged through the development of individualized projects (SAEs). Instruction will take place in the horticulture classroom, greenhouse, agriculture mechanics laboratory, computer laboratory, school grounds and community field trips. Elective students will not do as many hands on activities as double period program students.

Pre-requisites: Horticulture I

Number of Credits: 1

**Horticulture III Elective**—Horticulture III is the third elective course for the horticulture department and is open to students in grade 12. The course is designed to provide students with an interest in horticulture an opportunity to increase their skills in horticulture and continue their study of horticulture science. The focus of the class will be developing skills and knowledge related to landscaping. Students will study units about landscape design, installation and maintenance. Selling and marketing landscape services will also be included. Students will develop leadership skills through inter-curricular FFA and horticulture club activities. Individualized learning will be encouraged through the development of individualized projects (SAEs). Instruction will take place in the horticulture classroom, greenhouse, agriculture mechanics laboratory, computer laboratory, school grounds and community field trips. Elective students will not do as many hands on activities as double period program students.

Pre-requisites: Horticulture II

Number of Credits: 1

## **Co-Operative Education**

This “senior only” education option combines classroom study with planned and supervised on-the-job training which assists the student in understanding the world of work. Co-operative education provides employers in the community with responsible students who can be trained and skilled to meet the various community needs. Through joint cooperation of the school and the various businesses, a student is supervised in order to provide a more qualified and responsible employee on the job. Classroom theory activities include: communication skills, safety, business math, consumer information, economics, and career and job exploration. Co-operative education extends the school district’s curriculum and is offered to students who maintain a minimum of an 82 grade average in all subjects. Students are not permitted to miss more than ten (10) days of school for the year. If the student misses more than ten (10) days of school, he/she will be removed from the co-operative education program.

Pre-requisites: Prior approval by instructor and administration

Number of Credits: 3

## **Bedford County Technical Center (BCTC)**

Students at Northern Bedford may also schedule courses at the BCTC. We are not a participating member of the BCTC therefore we are not guaranteed enrollment. Students can select from the curriculum offerings in the grade nine year.

The course descriptions are directly from the listings at the BCTC.

### **Cosmetology**

3 Credits

Grades 10, 11, and 12

This three-year course, consisting of 1250 required hours, is offered to both male and female students. The first year students are introduced to the basic skills such as shampooing, scalp treatments, manicuring, hair styling, cold waving, and hair cutting. Safety, sterilization, and sanitation are stressed as important parts of each job. Second year students are required to place more emphasis on progress toward perfection of basic skills, including on-the-job training that is expected in beauty salons. Removal of superfluous hair, thermal waving and curling, chemical hair relaxing, skin care and makeup are added to the second year curriculum. During the third year, students have an intensive review of all skills and theory plus coloring, hair lightening electricity, chemistry, shop management, and the State Board of Cosmetology laws. Students are taught the importance of expectations to obtain a job. When students have completed this three-year course, they are qualified to take the state board examination required for a state license in cosmetology.

Career Opportunities: Cosmetology operator, teacher, manicurist, and manager.

### **Institutional Foods (Culinary Arts)**

3 Credits

Grades 10, 11, and 12

This program will be offered in a newly renovated kitchen and training restaurant which will eventually be open on a limited basis to the public. The purpose of the program is to prepare workers for the restaurant and hospitality industry. Graduates will be prepared to enter the workforce in a variety of areas. This course will be integrated for advanced standing for an associate degree from Allegany College. The program will include: Food safety and preparation, Presentation and service, Dining room

service and set-up, Kitchen management, Dining room management, Computer cash register and inventory, Entrepreneurial skills and management techniques.

Career Opportunities: Waiter/waitress, chef (with further education), cook, short order cook, host/hostess, dining room manager, cashier and more.

### **Health Assistant**

3 Credits

Grades 10, 11, and 12

Health/Medical Assistant is offered to 10<sup>th</sup>, 11<sup>th</sup>, & 12<sup>th</sup> grade students. The three-year program will offer a background in basic anatomy, physiology, diagnostic studies, pathophysiology, terminology, and practical skills. Studies in dental assisting, use of computers for medical office procedures, and the possibility of a cooperative work-study program are also included in the Health/Medical Assistant Course.

Career Opportunities: Nursing assistant, medical assistant, medical office/dental office assistant. The course also prepares students for advanced studies in the health professions.

### **Welding**

3 Credits

Grades 10, 11, 12

Metal Fabrication instruction includes classroom and shop learning experiences concerned with layout, fabrications, erection, installation and maintenance of items made of metal. Instruction subjects include drafting, blueprint reading and the use of hand tools and machines. CAD-CAM Techniques and procedures will be taught during the level II and III years of the course. The welding aspects of the program provides classroom and shop experience with all types of welding: Electric, Arc, Spot, TIG, Automatic, Semi-Automatic, and Oxyacetylene. Instruction emphasizes properties of metals, blueprint reading, electrical principles, welding symbols and mechanical drawing.

Career Opportunities: Welder of all types of material, welding fitter, grinder, machine operator, assembler, installer, drafters and CAD operators.