

Mifflinburg
Area
High
School



Course Offering List
and
Description Booklet

2008-2009

Mission Statement

Built upon our heritage of local traditional values, the mission of Mifflinburg Area High School, which serves a close-knit population from our district's small towns and rural areas, is to empower all learners, through a strong curriculum and related activities, to strive for excellence, to reach their individual potential, and to acquire the skills necessary to become responsible citizens who succeed in and contribute to society and who value learning throughout their lives

INTRODUCTION

Mifflinburg Area High School's curriculum combines a liberal education with a serious and thorough career preparation for the world of work. The high school views its educational program as the first step for each individual to develop the capacity to react creatively to new and unforeseen conditions. In addition, the variety of our approaches to education provides the opportunity for each student to acquire the knowledge and skills for today's world and to prepare for future careers.

Our school assumes that students come to our environment to learn, to pursue individual educational needs, and to accept the responsibility for planning their programs with the advice and direction of their parents, counselors and faculty. The Mifflinburg Area High School offers a diploma to each student who completes the school's requirements.

Your child will need to master higher order skills to function as a young adult in our technological society. Creativity, critical thinking, communication, problem solving, value development, social involvement and behavioral management are skills we hope to achieve. While each student possesses unique talents, all individuals encounter strengths and weaknesses within their own special character. With this variation in mind, it is appropriate for parents and students to choose different levels offered in the Mifflinburg High School ninth grade curriculum.

We offer our ninth grade students, with parental encouragement, the option of selecting more challenging honors classes in science, social studies, communication, and mathematics. The honors course level for ninth grade math is predetermined by a student's participation and success in the eighth grade Algebra I class. Parents are urged to consider their child's pattern of success and family expectations when considering an honors level course. The honors class challenges a student to work hard in high school in order to be exceedingly well prepared for entrance into any post-secondary educational program.

The Mifflinburg Area High School offers an alternative to the traditional college-prep sequence. The Tech Prep program is made up of sequences of courses designed to prepare students for high-skill technical occupations. It begins in high school and may continue through at least two years of post-high school occupational training at various technical colleges or institutions. Students who take Tech Prep can enter the work force directly after high school graduation or continue on in a certificate or associate degree program. Tech Prep gives students the academic and technical foundation they need for a fast changing technological society.

Tech Prep offers classes in applied academics. These courses combine academic and technical learning. Mathematics, science, and communication are taught in a hands-on applied manner, which brings relevancy to the content and prepares students for "*real life*" occupational situations. Beginning in ninth grade, students can choose one of ten Tech Prep sequences:

- Tech Prep Agricultural Mechanization
- Tech Prep Agricultural Production
- Tech Prep Arts-Design
- Tech Prep Business Technology
- Tech Prep Computer Technology
- Tech Prep Drafting Technology
- Tech Prep Energy/Power/Transportation Technology
- Tech Prep Food Services
- Tech Prep Health and Family Sciences
- Tech Prep Industrial Materials Technology

An opportunity to attend the SUN Area Career and Technology Center the senior year is available but not required. Tech Prep agreements with institutions of higher education are also available upon graduation.



Guidance

Faculty

Mrs. Grubb
Mr. Shriver

Graduation Requirements

Graduation from the Mifflinburg Area High School, which is accredited by the Pennsylvania Department of Education and the Middle States Association (re-accredited, 2007), must be in accordance with the graduation standards as established by the Mifflinburg Area School Board. The following are the minimum graduation standards:

1. Twenty-two units of credit in grades 9, 10, 11, and 12 shall be satisfactorily completed for graduation by all students and shall include the following:

(a) Five units of communication are required for all students who spend four full years at the home school. The communication requirements for these students are: two units of communications in grade 9, and one unit of communication in grades 10, 11, and 12.

Four units of communication are required for all students who are enrolled in the SUN Area Career and Technology Center during their senior year. The communication requirements for these students are the following: two units of communication in grade 9, and one unit of communication in grades 10 and 11.

(b) Three units of science.

(c) Three units of mathematics.

(d) Three units of social studies.

(e) One unit of health and physical education. Health is concentrated in grade 9. Physical education shall be taken in grades 9, 10, 11, and 12.

(f) Two units of art and humanities.

(g) Five additional courses approved as graduation credits by the school district.

(h) SUN Tech Program

(1) 180 day or full-time program: These students must successfully complete (6) units of work in the SUN Tech school during their senior year.

2. Beginning with the Class of 2000, all students are required to complete the district's approved student project.

Remedial Coursework

All students not scoring at or above the proficient level on the Pennsylvania System of School Assessments are encouraged to take remedial courses in an effort to improve upon the areas addressed in the state standards. After the junior year, a remedial course in the non-proficient area will be required.

RECOMMENDED HIGH SCHOOL SEQUENCES

College Preparatory Program Sequence

The College Preparatory Program is designed to provide students with in-depth knowledge in a traditional and disciplined mode in order to prepare an individual for a four-year college. After post high school education, a student may enter occupations such as: physician, dentist, lawyer, teacher, physical therapist, engineer, minister, nurse, accountant, library assistant, bank teller, insurance agent and broker, salesperson, and real estate agent.

Tech Prep-Agriculture Mechanization Sequence

This is a sequence of courses designed to prepare students with skills for a variety of areas associated with the field of agricultural mechanization. Specific career areas may include mechanics/technicians, equipment and products sales and services, natural/public resources technician, and many other related occupations as well as those agriculture professions requiring further education.

Tech Prep-Agriculture Production Sequence

This is a sequence of courses designed to prepare students with skills for a variety of areas associated with the field of agriculture production. Specific career areas may include farming, forestry, horticulture; surveying, agricultural business, and many other related occupations as well as those agriculture professions requiring further education.

Tech Prep-Arts-Design Sequence

This sequence of courses is designed to prepare students with skills for a variety of areas associated with the field of visual arts and design. Specific career areas may include advertising, layout and design, model construction, art production and critique, and many other related occupations as well as those arts and design professions requiring further education.

Tech Prep-Business Technologies Sequence

This is a sequence of courses designed to prepare students with skills for a variety of areas associated with the field of business. Specific career areas may include accounting, information technology; management, marketing, and many other related occupations as well as those business professions requiring further education.

Tech Prep-Computer Technology Sequence

This sequence of courses is designed to prepare students with skills for a variety of areas associated with the field of computers. Specific career areas may include computer technician, computer programmer, systems designer, and many other related occupations as well as those computer professions requiring further education.

Tech Prep-Drafting Technology Sequence

This sequence of courses is designed to prepare students with skills for a variety of areas associated with the field of drafting. Specific career areas may include drafter/designer, designer/technician, engineer, and many other related occupations as well as those engineering professions requiring further education.

Tech Prep-Energy/Power/Transportation Technology Sequence

This sequence of courses is designed to prepare students with skills for a variety of areas associated with the field of power technology. Specific career areas may include electrical and electronics equipment repairers/installers, electrician, industrial equipment maintenance, vehicle and mobile equipment technicians, and many other related occupations as well as those related professions requiring further education.

Tech Prep-Food Services Sequence

This sequence of courses is designed to prepare students with skills for a variety of areas associated with the field of food services. Specific career areas may include food preparation, retail food services, consumer services, and many other related occupations as well as those food service professions requiring further education.

Tech Prep-Family Sciences Sequence

This sequence of courses is designed to prepare students with skills for a variety of areas associated with the field of health and family sciences. Specific career areas may include child and elderly care, health and medical services, education assistant services, and many other related occupations as well as those health and family professions requiring further education.

Tech Prep-Industrial Materials Technology Sequence

This sequence of courses is designed to prepare students with skills for a variety of areas associated with the field of industrial materials. Specific career areas may include wood/metal working, machining, standard and numerical machine operations, forging/casting/welding, and many other related occupations as well as those industrial professions requiring further education.

COLLEGE PREP
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Honors Communications I	1.04	Honors Communications II	1.04
or		or	
Communications I	1.0	Communications II	1.0
		or	
		Gifted Humanities/Inquiries	1.04
Honors Algebra II	1.04	Honors Geometry-Trig	1.04
or		or	
Algebra I	1.0	Geometry	1.0
		or	
		Algebra II	1.0
Honors Earth Science	1.04	Honors Biology	1.04
or		or	
Earth Science	1.0	Biology	1.0
Honors American Cultures	1.04	Honors American Cultures II	1.04
or		or	
American Cultures I	1.0	American Cultures II	1.0
Language Skills or PSSA Math or Gifted Seminar	1.0 1.04	Phys. Ed./Driver Ed.	.5
Foreign Language	1.0	Foreign Language	1.0
Health/Phys. Ed.	.5	Elective Options	
Computer Keyboarding-Applications	.5	or	2.5
Elective Options	1.0	Language Skills/Elective Options	
<u>Grade 11</u>		<u>Grade 12</u>	
Honors Communications III	1.04	AP English Lit. & Composition	1.08
or		or	
Communications III	1.0	Communications IV	1.0
or			
Gifted Humanities/Inquiries	1.04	AP Calculus-AB	1.08
Honors Advanced Math	1.04	or	
or		Advanced Math	1.04
Trigonometry	1.0	or	
or		Trigonometry	1.0
Geometry	1.0	or	
		Probability and Statistics	1.0
AP European History	1.08	Constitution Issues	
or		or	1.0
World Cultures	1.0	Psychology/Government	
Chemistry	1.04	Physics	1.04
Economics	1.0	Phys. Ed.	.35
Phys. Ed.	.35	Elective Options	3.0
Elective Options	2.0		

TECH PREP / AGRICULTURAL MECHANIZATION
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills or PSSA Math	1.0	Biology or Applied Biology	1.0
Earth Science	1.0	American History Highlights	1.0
American Cultures I	1.0	Phys. Ed./Driver Ed.	.5
Health/Phys. Ed.	.5	Agriculture Education II	2.0
Computer Keyboarding-Applications	.5	Elective Options or Language Skills and Elective Options	1.5
Agriculture Education I (2 credits) or Agriculture Education I (1 credit) and Band (or) choir (or) language	2.0		
<u>Grade 11</u>		<u>**Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry or Principles of Technology	1.04 1.0	Constitutional Issues or Psychology/Government	1.0
Global Issues	1.0	Economics	1.0
Consumer Economics	1.0	Phys. Ed.	.35
Phys. Ed.	.35	Elective Options	1.0
Agriculture Education III (2 credits) or Agriculture Education III (1 credit) and Band (or) choir (or) language	2.0	Agriculture Education IV	2.0

**SUN options for grade 12 sequences are the Manufacturing, Building Trades, or Transportation Clusters (a Mathematics course will be required at SUN for Tech-Prep certification if a SUN option is chosen for grade 12)

Gifted or Honors options are available.

TECH PREP / AGRICULTURAL PRODUCTION
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills	1.0	Biology or Applied Biology	1.0
Earth Science	1.0		
American Cultures I	1.0	American History Highlights Phys. Ed./Driver Ed.	1.0 .5
Health/Phys. Ed.	.5		
Computer Keyboarding-Applications	.5	Agriculture Education II	2.0
Agriculture Education I (2 credits) or Agriculture Education I (1 credit) and SIMMS Math I	2.0	Elective Options or SIMMS Math II and Elective Options	1.5
or Band (or) choir (or) language			
<u>Grade 11</u>		<u>**Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry or Principles of Technology	1.04 1.0	Constitutional Issues or Psychology/Government	1.0
Global Issues	1.0	Economics	1.0
Consumer Economics	1.0	Phys. Ed.	.35
Phys. Ed.	.35	Elective Options	1.0
Agriculture Education III (2 credits) or Agriculture Education III (1 credit) and Band (or) choir (or) language	2.0	Agriculture Education IV	2.0

**No SUN option if pursuing post-secondary Tech-Prep certification.

Gifted or Honors options are available.

TECH PREP / ARTS-DESIGN TECHNOLOGY
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills or PSSA Math	1.0	Biology or	1.0
Earth Science	1.0	Applied Biology	
American Cultures I	1.0	American History Highlights	1.0
Health/Phys. Ed.	.5	Phys. Ed./Driver Ed.	.5
Computer Keyboarding-Applications	.5	*Arts-Design Sequence II	1.5
*Arts-Design Sequence I	1.0	Elective Options	
Elective Options	1.0	or	2.0
		Language Skills and Elective Options	
<u>Grade 11</u>		<u>**Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry or Principles of Technology	1.04 1.0	Constitutional Issues or Psychology/Government	1.0
Global Issues	1.0	Economics	1.0
Consumer Economics	1.0	***Science Elective	1.0
Phys. Ed.	.35	Phys. Ed.	.35
*Arts-Design Sequence III	1.0	*Arts-Design Sequence IV	1.0
Elective Options	1.0	Elective Options	1.0

*See reverse side for sequence descriptions

**SUN option for grade 12 sequences is the Communications Cluster (a Mathematics course will be required for Tech-Prep certification if a SUN option is chosen for grade 12).

***The Science Elective course offering in 12 will be Practical Chemistry or Anatomy and Physiology or Environmental Science – depending on availability

Gifted or Honors options are available.

Arts-Design Sequence I consists of one credit hour of any of the following courses:

- Painting
- Lettering and Design
- Art Aesthetics
- Drawing and Painting
- Pottery and Sculpture

Arts-Design Sequence II consists of one and one-half credit hours of any of the following courses not previously taken in sequence I:

- Painting
- Lettering and Design
- Pottery and Sculpture
- MS Publisher
- Drawing and Painting
- Art Aesthetics
- Advanced Computer Applications

Arts-Design Sequence III consists of one credit hour of any of the following courses not previously taken in sequences I or II:

- Painting
- Lettering and Design
- Pottery and Sculpture
- Advanced Pottery
- MS Publisher
- Drawing and Painting
- Advanced Computer Applications
- Art Aesthetics
- Portfolio Art

Arts-Design Sequence IV consists of two credit hours of any of the following courses not previously taken in sequences I, II, or III:

- Painting
- Pottery and Sculpture
- Advanced Pottery
- Lettering and Design
- Advanced Project
- Drawing and Painting
- Art Aesthetics
- Advanced Computer Applications
- Portfolio Art
- MS Publisher

TECH PREP / BUSINESS TECHNOLOGY
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills or PSSA Math	1.0	Biology or Applied Biology	1.0
Earth Science	1.0	American History Highlights	1.0
American Cultures I	1.0	Phys. Ed./Driver Ed.	.5
Health/Phys. Ed.	.5	Fashion Marketing	.5
Computer Keyboarding/Applications	.5	Entertainment Marketing	.5
Advanced Computer Applications	.5	MS Publisher	.5
Advanced Computer Keyboarding	.5	Advanced MS Publisher	.5
Elective Options	1.0	Elective Options	1.5
		or Elective Options and Language Skills	.5 1.0
<u>Grade 11</u>		<u>*Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry	1.04	Constitutional Issues or Psychology/Government	1.0
Principles of Technology	1.0	Economics	1.0
Global Issues	1.0	Accounting II	1.0
Consumer Economics or Band or Choir or Foreign Language	1.0	Entrepreneurship	.50
Phys. Ed.	.35	Phys. Ed.	.35
Accounting I	1.0	Elective Options	1.5
Elective Options	1.0		

*No SUN option if pursuing post-secondary Tech-Prep certification.

Gifted or Honors options are available.

TECH PREP / COMPUTER TECHNOLOGY
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills or PSSA Math	1.0	Biology or Applied Biology	1.0
Earth Science	1.0	American History Highlights	1.0
American Cultures I	1.0	Phys. Ed./Driver Ed.	.5
Health/Phys. Ed.	.5	Advanced Computer Keyboarding	.5
Computer Keyboarding-Applications	.5	Advanced Computer Applications	.5
*Computer Technology Sequence I	1.0	*Computer Technology Sequence II	1.5
Elective Options	1.0	Elective Options	
		or	1.0
		Language Skills	
<u>Grade 11</u>		<u>**Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry or Principles of Technology	1.04 1.0	Constitutional Issues or Psychology/Government	1.0
Global Issues	1.0	Economics	1.0
Consumer Economics or Band or Choir or Foreign Language	1.0	Phys. Ed.	.35
Phys. Ed.	.35	Engineering Design – 1	.50
*Computer Technology Sequence III	1.5	Engineering Design – 2	.50
Elective Options	.5	*Computer Technology Sequence IV	1.0
		Elective Options	1.0

*See reverse side for sequence descriptions

**SUN option for grade 12 sequences is the Technical Cluster (a Mathematics course will be required at SUN for Tech-Prep certification if a SUN option is chosen for grade 12).

Gifted or Honors options are available.

Computer Technology Sequence I consists of one credit hour of any of these courses:

- Multi-Media
- MS Publisher
- Adv. MS Publisher
- Architectural Drafting
- Electricity-Electronics
- Engineering Drafting

Computer Technology Sequence II consists of one and one-half credit hours of any of the following courses not previously taken in sequence I:

- Multi-Media
- MS Publisher
- Adv. MS Publisher
- Computer Programming
- Independent Programming I
- Independent Programming II
- Architectural Drafting
- Engineering Drafting
- Electricity-Electronics

Computer Technology Sequence III consists of one and one half credit hours of any of the following courses not previously taken in sequence I or II:

- Multi-Media
- MS Publisher
- Adv. MS Publisher
- Computer Programming
- Independent Programming I
- Independent Programming II
- Architectural Drafting
- Engineering Drafting
- Electricity-Electronics

Computer Technology Sequence IV consists of one and one-half credit hours of any of the following courses not previously taken in sequence I, II, or III:

- Multi-Media
- MS Publisher
- Adv. MS Publisher
- Computer Programming
- Independent Programming I
- Independent Programming II
- Adv. Power Technology I
- Architectural Drafting
- Electricity-Electronics
- Engineering Drafting

TECH PREP / DRAFTING TECHNOLOGY
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills or PSSA Math	1.0	Biology or Applied Biology	1.0
Earth Science	1.0	American History Highlights	1.0
American Cultures I	1.0	Phys. Ed./Driver Ed.	.5
Health/Phys. Ed.	.5	*Applied Technologies Sequence II	2.0
Computer Keyboarding-Applications	.5	Elective Options	
*Applied Technologies Sequence I	1.0	or Language Skills and Elective Options	1.5
Elective Options	1.0		
<u>Grade 11</u>		<u>Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry or Principles of Technology	1.04 1.0	Constitutional Issues or Psychology/Government	1.0
Global Issues	1.0	Economics	1.0
Consumer Economics	1.0	**Science Elective	1.0
Phys. Ed.	.35	Phys. Ed.	.35
Advanced Drafting I	.5	Advanced Drafting III	.5
Advanced Drafting II	.5	Advanced Drafting IV	.5
Elective Options	1.0	Elective Options	1.0

*See reverse side for sequence descriptions

**The Science Elective course offering in 12 will be Practical Chemistry or Anatomy and Physiology or Environmental Science – depending on availability

***SUN option for grade 12 sequences is the Manufacturing Cluster (a Mathematics course will be required at SUN for Tech-Prep certification if a SUN option is chosen for grade 12).

Gifted or Honors options are available.

Applied Technologies Sequence I consists of credit hour of any of the following courses:

- Wood Technology
- Metal Fabrication
- Electricity-Electronics
- Power Technology
- Architectural Drafting
- Engineering Drafting

Applied Technologies Sequence II consists of two credit hours of any of the following courses not previously taken in sequence I:

- Wood Technology
- Metal Fabrication
- Electricity-Electronics
- Power Technology
- Architectural Drafting
- Engineering Drafting

TECH PREP / ENERGY/POWER/TRANSPORTATION TECHNOLOGY
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills or PSSA Math	1.0	Biology or	1.0
Earth Science	1.0	Applied Biology	
American Cultures I	1.0	American History Highlights	1.0
Health/Phys. Ed.	.5	Phys. Ed./Driver Ed.	.5
Computer Keyboarding-Applications	.5	*Applied Technologies Sequence II	2.0
*Applied Technologies Sequence I	1.0	Elective Options	
Elective Options	1.0	or	1.5
		Language Skills and Elective Options	
 <u>Grade 11</u>		 <u>***Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry	1.04	Constitutional Issues or	1.0
Principles of Technology	1.0	Psychology/Government	
Global Issues	1.0	Economics	1.0
Consumer Economics	1.0	**Science Elective	1.0
Phys. Ed.	.35	Phys. Ed.	.35
Advanced Power Technology I	.5	Advanced Power Technology III	.5
Advanced Power Technology II	.5	Advanced Power Technology IV	.5
Elective Options	1.0	Elective Options	1.0

*See reverse side for sequence descriptions

**The Science Elective course offering in 12 will be Practical Chemistry or Anatomy and Physiology or Environmental Science – depending on availability

***SUN options for grade 12 sequences are the Building Trades, Transportation, or Technical Clusters (a Mathematics course will be required at SUN for Tech-Prep certification if a SUN option is chosen for grade 12).

Gifted or Honors options are available.

Applied Technologies Sequence I consists of credit hour of any of the following courses:

- Wood Technology
- Metal Fabrication
- Electricity-Electronics
- Power Technology
- Architectural Drafting
- Engineering Drafting

Applied Technologies Sequence II consists of two credit hours of any of the following courses not previously taken in sequence I:

- Wood Technology
- Metal Fabrication
- Electricity-Electronics
- Power Technology
- Architectural Drafting
- Engineering Drafting

TECH PREP / FOOD AND HOSPITALITY SERVICES
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills or PSSA Math	1.0	Biology or Applied Biology	1.0
Earth Science	1.0	American History Highlights	1.0
American Cultures I	1.0	Phys. Ed./Driver Ed.	.5
Health/Phys. Ed.	.5	***Food Service Sequence I	1.5
Computer Keyboarding-Applications	.5	Elective Options	or 2.0
Intro. To Family Sciences	.5	Language Skills and Elective Options	
Intro. To Food Services	.5		
Elective Options	1.0		
 <u>Grade 11</u>		 <u>**Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry or Principles of Technology	1.04 1.0	Constitutional Issues or Psychology/Government	1.0
Global Issues	1.0	Economics	1.0
Consumer Economics	1.0	*Science Elective	1.0
Phys. Ed.	.35	Phys. Ed.	.35
***Food Service Sequence II	.5	Advanced Food Services II	.5
Advanced Food Services I	.5	Advanced Food Services III	.5
Elective Options	1.0	Elective Options	1.0

*The Science Elective course offering in 12 will be Practical Chemistry or Anatomy and Physiology or Environmental Science – depending on availability.

**SUN option for grade 12 sequences is the Health and Service Cluster (a Mathematics course will be required at SUN for Tech-Prep certification if a SUN option is chosen for grade 12).

***See reverse side for sequence descriptions.

Gifted or Honors options are available.

Food Service Sequence I consists of one and one half credit hours of the following courses:

Current Issues in Health
First Aid/CPR/AED Training

Food Power
Foods of The World

Food Service Sequence II consists of one half credit hour of any of the following courses not previously taken in Sequence I:

Current Issues in Health
First Aid/CPR/AED Training

Food Power
Foods of The World

TECH PREP / HEALTH AND FAMILY SCIENCES
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills or PSSA Math	1.0	Biology or Applied Biology	1.0
Earth Science	1.0	American History Highlights	1.0
American Cultures I	1.0	Phys. Ed./Driver Ed.	.5
Health/Phys. Ed.	.5	*Health & Family Science Sequence I	2.0
Computer Keyboarding-Applications	.5	Elective Options	
Intro. To Family Sciences	.5	or Language Skills and Elective Options	1.5
Intro. To Food Services	.5		
Elective Options	1.0		
 <u>Grade 11</u>		 <u>**Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry or Principles of Technology	1.04 1.0	Psychology/Government Phys Ed.	1.0 .35
Global Issues	1.0	Basic Anatomy and Physiology	1.0
Consumer Economics	1.0	Advanced Family Sciences I	.5
Phys. Ed.	.35	Advanced Family Sciences II	.5
*Health & Family Science Sequence II	1.0	Advanced Family Sciences III	.5
Elective Options	1.0	Elective Options	1.5

*See reverse side for sequence descriptions

**SUN option for Grade 12 sequence is the Health and Service Cluster (a Mathematics course will be required at SUN for Tech-Prep certification if a SUN option is chosen for grade 12).

Gifted or Honors options are available.

Health & Family Science Sequence I consists of two credit hours of the following courses:

Current Issues in Health
First Aid/CPR/AED Training
Living Independently

Family & Consumer Wellness
Child Development I
Child Development II

Health & Family Science Sequence II consists of one credit hour of any of the following courses not previously taken in Sequence I:

Current Issues in Health
First Aid/CPR/AED Training
Living Independently
Understanding Disabilities

Family & Consumer Wellness
Child Development I
Child Development II

TECH PREP / INDUSTRIAL MATERIALS TECHNOLOGY
2008-2009

<u>Grade 9</u>		<u>Grade 10</u>	
Communications I or Integrated Communications I	1.0	Communications II or Integrated Communications II	1.0
Algebra I or Integrated Math I	1.0	Algebra II or Integrated Math II	1.0
Language Skills or PSSA Math	1.0	Biology or Applied Biology	1.0
Earth Science	1.0	American History Highlights	1.0
American Cultures I	1.0	Phys. Ed./Driver Ed.	.5
Health/Phys. Ed.	.5	*Applied Technologies Sequence II	2.0
Computer Keyboarding-Applications	.5	Elective Options	1.5
*Applied Technologies Sequence I	1.0	or Language Skills and Elective Options	
Elective Options	1.0		
<u>Grade 11</u>		<u>***Grade 12</u>	
Communications III or Integrated Communications III	1.0	Communications IV or Integrated Communications IV	1.0
Geometry or Algebra II or Integrated Math III	1.0	Trigonometry or Probability and Statistics or Algebra II or Integrated Math IV	1.0
Chemistry or Principles of Technology	1.04 1.0	Constitutional Issues or Psychology/Government	1.0
Global Issues	1.0	Economics	1.0
Consumer Economics	1.0	**Science Elective	1.0
Phys. Ed.	.35	Phys. Ed.	.35
Advanced Industrial Materials I	.5	Advanced Industrial Materials III	.5
Advanced Industrial Materials II	.5	Advanced Industrial Materials IV	.5
Elective Options	1.0	Elective Options	1.0

*See reverse side for sequence descriptions

**The Science Elective course offering in 12 will be Practical Chemistry or Anatomy and Physiology or Environmental Science – depending on availability

***SUN options for grade 12 sequences are the Manufacturing or Building Trade Clusters (a Mathematics course will be required at SUN for Tech-Prep certification if a SUN option is chosen for grade 12).

Gifted or Honors options are available.

Applied Technologies Sequence I consists of credit hour of any of the following courses:

- Wood Technology
- Metal Fabrication
- Electricity-Electronics
- Power Technology
- Architectural Drafting
- Engineering Drafting

Applied Technologies Sequence II consists of two credit hours of any of the following courses not previously taken in sequence I:

- Wood Technology
- Metal Fabrication
- Electricity-Electronics
- Power Technology
- Architectural Drafting
- Engineering Drafting



Communications

Faculty

Miss Aumiller
Mr. Beddall

Mrs. Faunce
Ms. Henry

Mr. Messimer
Mrs. Piorkowski
Mrs. Toluba

060 Adv English Composition

Students will consider various techniques of English composition and practice them daily. Narration, description, exposition, and argumentation will be practiced. Students will also write character sketches and one longer paper to gain proficiency in library research and documentation. College Prep students will especially benefit from this course as a preparation for freshman composition courses.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

035 AP English Literature & Composition

In this advanced placement course students read literary works in the genres of fiction, verse, drama and essay. They study the work, characters, conflicts, and themes, and analyze its structure, meaning, value and relationship to contemporary experience as well as to its historical context. Students write in relation to the literature studied and recognize various rhetorical purposes. Prereq: Students must submit two teacher recommendations, a writing sample, performance contract signed by parent and student, and have a recommended Communications average of 88%. Students are expected too take the AP Exam.

CREDIT: 1.08 GRADE: 12 PREREQ: Recommended as Noted Above

005 Communications I

This course challenges students in the areas of reading, writing, speaking, and listening. Classic novels, short stories, drama, and poetry are taught on structural and conceptual levels. Writing instruction includes structure of the essay as well as writing assignments based on readings and instruction in four types of prose. Listening and speaking are integral parts of classroom experience. Students are challenged to improve spoken and written vocabularies.

CREDIT: 1.00 GRADE: 9 PREREQ: None

017 Communications II

This course concentrates on literature, composition, and vocabulary study. Grammar is viewed as a tool which improves students' writing techniques. Composition concentrates on creativity and analytical writing based upon the literature studied. Students present oral interpretations of the poetry and drama material with other formal class presentations.

CREDIT: 1.00 GRADE: 10 PREREQ: None



027 Communications III

This course gives students a knowledge of and appreciation for the history and ideas inherent in American literature from early through modern times. English usage and composition centers on a review of language structure as related to proper spoken and written communications.

CREDIT: 1.00 GRADE: 11 PREREQ: None

037 Communications IV

This course aims to give the student a knowledge of and appreciation for his literary heritage through a study of English literature, to aid in the interpretation and evaluation of ideas, to teach him to express himself effectively orally and in writing. Areas of emphasis include: a survey study of British writers and writing from Anglo-Saxon to modern times, detailed study of a Shakespearean play and a modern novel, study of writing sentences, paragraphs, and longer expository compositions, presentation of oral reports, and vocabulary study. The writing process will be applied to certain writing projects.

CREDIT: 1.00 GRADE: 12 PREREQ: None

062 Creative Writing

The writing of poetry, prose, and drama will be the means and ends of this course. The study of particular poems, short fictions, and plays will provide models and examples of effective writing for the student. A workshop situation will prevail in which students will read and comment on writings by their classmates. Various techniques and assignments will serve to stimulate and develop students' writing. This course is also approved for enrichment students.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Communications I

012 Gifted Humanities

Another phase of the Gifted Program sequence embodies three specific units: Literature and Non-fiction, Composing, Oral and Written, and Investigating Self and Areas of Interest. Students enhance their critical and analytical skills through literary selections which include Julius Caesar and Lord of the Flies. Differentiation involves discussions of fallacies of logic, Socratic questioning, DISC personality style assessment and strategies and practice for the PSAT. This course replaces the regular education Communications course the student would otherwise elect and receives an English credit. This course will be offered in alternating years with Gifted Inquiry.

CREDIT: 1.04 GRADE: 10,11 PREREQ: Individualized Education Plan



022 Gifted Inquiry

Individual inquiries enhance critical thinking skills add the metacognitive process in the Gifted Program. Moral dilemmas provide the foundation of leadership competencies addressed through an American Literature base. In addition, opportunities for students to understand themselves and prepare for their futures are provided through the administration of the Myers-Briggs Type Inventory. This provides the springboard for some college search activities and leads us to compose letters of application which they may use at future dates. This course replaces the English credit the student would otherwise receive for a Communications course. This course will be offered in alternating years with Gifted Humanities.

CREDIT: 1.04 GRADE: 10,11 PREREQ: Individualized Education Plan

001 Gifted Seminar

Students are introduced to the Gifted Program sequence in ninth grade. Primarily, study and research skills are identified and developed. Self-directed learning behaviors and research capabilities are assessed through the creation of an eminent individual's project which may reach into a variety of academic disciplines. Vocabulary and language competencies are developed through expository and reflective writing and oral presentations. Metacognition activities mark the difference between this course and Language Skills. Students receive an English credit for this course.

CREDIT: 1.04 GRADE: 9 PREREQ: Individualized Education Plan

003 Honors Communications I

Students follow an outline of readings: essays, short stories, novels, plays and poetry. Analysis of readings includes class discussion, varied compositions, and projects designed to enhance reading experiences. Writing skills, grammar, usage, and mechanics necessary to write the essays required for the course are reviewed, relearned and learned. Essay structure, expanded vocabulary, facility with language, individual inquiry, and cooperative learning are stressed. A minimum of 88% in 8th grade Communications is recommended to schedule this course.

CREDIT: 1.04 GRADE: 9 PREREQ: Recommended as Noted Above

015 Honors Communications II

The emphasis in literature is concentrated on the study of British selections. Included are drama, biography, poetry, essay, short story, and the novel. Composition consists of both expository and creative pieces reflecting the literary pieces studied. Grammar, usage, and vocabulary reflect student needs. Formal and informal class presentations emphasize speaking and listening skills. A minimum average of 88% in Honors Communications I or 90% in Communications is recommended to schedule this course.

CREDIT: 1.04 GRADE: 10 PREREQ: Recommended as Noted Above

**025 Honors Communications III**

The emphasis in literature is concentrated on the study of American selections. Students study the history of the development of American literature and read extensively from each historical and literary period. Writings are in response to the literature studied and to controversial issues in the world today. Structural review of agreement, usage, and mechanics is extensive. Vocabulary is derived from the works studied. A minimum average of 88% in Honors Communications II or 90% in Communications II is recommended to schedule this course.

CREDIT: 1.04

GRADE: 11

PREREQ: Recommended as Noted Above

072 Independent Study

An independent study provides the opportunity for an investigation beyond our course offerings. It is intended for highly motivated students with the initiative to organize and complete a self-directed learning project with the help of an approved mentor. Any student considering this offering must complete a contract with the Independent Study Coordinator no less than one marking period before the project begins. A *“learning log”* must be kept. An independent study course may not be dropped after being signed by the student, parent, mentor, and principal. The evaluation of this study shall be by the mentor, student, or an evaluation team.

CREDIT: Varies

GRADE: 11,12

PREREQ: Principal's Approval Required

007 Integrated Communications I

The purpose of Integrated Communications I is to prepare students to perform in the proficient or advanced categories on the 11th grade Pennsylvania System of School Assessment test. The course includes units on reading independently and critically; analyzing and interpreting fiction and non-fiction literature; writing narrative, persuasive, and informational compositions; and increasing vocabulary.

CREDIT: 1.00

GRADE: 9

PREREQ: None

019 Integrated Communications II

The purpose of Integrated Communications II is to prepare students to perform in the proficient or advanced categories on the 11th grade Pennsylvania System of School Assessment test. The course includes units on reading independently and critically; analyzing and interpreting fiction and non-fiction literature; writing narrative, persuasive, and informational compositions; developing speaking and listening skills; developing vocabulary; and gathering information to conduct research.

CREDIT: 1.00

GRADE: 10

PREREQ: None



029 Integrated Communications III

The purpose of Integrated Communications III is to prepare students to perform in the proficient or advanced categories on the 11th grade Pennsylvania System of School Assessment test. The course includes units on reading independently and critically; analyzing and interpreting fiction and non-fiction literature; writing narrative, persuasive, and informational compositions; developing speaking and listening skills; developing vocabulary; and gathering information to conduct research.

CREDIT: 1.00 GRADE: 11 PREREQ: None

039 Integrated Communications IV

The purpose of Integrated Communications IV is to prepare students to perform in the proficient or advanced categories on the 12th grade retest of the 11th grade Pennsylvania System of School Assessment test. The course includes units on reading independently and critically; analyzing and interpreting fiction and non-fiction literature; writing narrative, persuasive, and informational compositions; developing speaking and listening skills; developing vocabulary; and gathering information to conduct research.

CREDIT: 1.00 GRADE: 12 PREREQ: None

009 Language Skills

Language Skills includes the skills of reading, writing, listening, and speaking. This course integrates the four elements of communication into the study of novels, literary items, vocabulary, public speaking, and study and research skills. The Library Skills component assists students to effectively use the library for their graduation projects.

CREDIT: 1.00 GRADE: 9 PREREQ: None

064 SAT Verbal Prep

This course takes an extensive look at the Scholastic Aptitude Test, its construction, and its scoring. Highlights are reviews of vocabulary and mathematics included on the test. Students review strategies for taking the various sections of the test and work with actual sample SATs. College preparatory students especially will benefit from this course.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None



English as a Second Language

Faculty Mrs. Lawrence

002 ELL Communications

This is a Communications course designed for students whose primary language is one other than English. Students taking this course are enrolled in the English as a Secondary Language program. Students taking this course will be participating in activities and guided in lessons which are specifically designed to meet their English language needs in the domains of listening, speaking, reading, and writing. The focus of this course is a mix of grammar, language study, guided reading, and writing. The students in this course will complete the Standard English Language Proficiency Test, which is given in the spring each year.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Administrative Assignment

Foreign Languages

Faculty Mr. Beachy	Mrs. Gillott	Mrs. Keeler
-----------------------	--------------	-------------

040 French I

The purpose of any French course is to teach the students to listen, speak, read, and write the language. In the first year, emphasis is placed on getting the students accustomed to the sounds of the language, and teaching them to reproduce these sounds. French is spoken in the classroom as much as possible. In building a vocabulary, the student learns to both say and write the words. Basic grammatical concepts are taught, and these are reinforced through oral and written drills. In the classroom, some games, tapes, pictures, and films are used for variety. Also, the student learns something of French culture or way of life.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: None

041 Spanish I

First year Spanish is an introductory course with emphasis on learning the sounds and pronunciation of the Spanish language. This is accomplished by learning vocabulary, grammar and phrases that relate to the students themselves, their families and friends as well as telling time, talking about the weather, their school, their hobbies and activities. Students are given the opportunity to listen to, speak, read and write Spanish through the use of tapes, class participation and frequent homework.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: None



045 French II

During the second year, students are encouraged to speak French actively in the classroom. There is a continuation of the learning of vocabulary and the grammatical structures become more complex. This year, along with listening and speaking, reading is emphasized. Several short stories and plays are read. There is an increased learning of French history, customs, literature and culture.

CREDIT: 1.00

GRADE: 10,11,12

PREREQ: French I

047 Spanish II

The second year Spanish course continues with an intense study of grammar and vocabulary. In addition to the text, students read two short books which reinforce the lessons being taught in the text. Students are encouraged to give more lengthy responses in answer to questions than just the cued responses from Spanish I. Students are introduced to some of the literature of Spain by watching *Man of La Mancha* and studying its author Miquel Cervantes. Increased written and verbal expressions are stressed.

CREDIT: 1.00

GRADE: 10,11,12

PREREQ: Spanish I

052 French III

Third year students use a variety of texts and a grammar workbook to learn advanced French grammar, increase usage and emphasize idiomatic expressions. The students also complete a unit on Canada, famous historical figures of France and French cuisine.

CREDIT: 1.00

GRADE: 11,12

PREREQ: French I, II

053 Spanish III

The Spanish III includes a review of Spanish grammar and continues to refine those rules previously learned. Two more short stories are read giving the students an opportunity to speak and write to increase their fluency. A unit on the early history of Spain is also a part of the third year of study. Reinforcement of vocabulary and grammar as well as idiomatic expressions is stressed while incorporating new patterns.

CREDIT: 1.00

GRADE: 11,12

PREREQ: Spanish I, II

056 French IV

The French IV course provides an opportunity for the student to improve his speaking and writing ability through writing exercises and oral reports or stories. A book with short stories and plays is used to provide more vocabulary and information about French culture. French IV students also complete units about French protectorate countries, French artists and musicians, and a more advanced unit of French cuisine.

CREDIT: 1.00

GRADE: 12

PREREQ: French I, II, III



057 Spanish IV

Spanish IV provides students with the opportunity to read and discuss several literary pieces representing a number of Spanish speaking countries and various writing styles. Classroom discussion is practiced daily with students required to express themselves entirely in Spanish. Written assignments are used to study grammar and vocabulary. A journal is kept in Spanish giving students the opportunity to write daily in the language.

CREDIT: 1.00

GRADE: 12

PREREQ: Spanish I, II, III

**Mathematics****Faculty**Mr. Bailey
Mr. BennerMrs. Haines
Mr. HoyMrs. Shearer
Mr. Sholly**170 Adv Math**

This course seeks to develop an intuitive base and some of the working tools for the study of more advanced mathematics such as Probabilities & Statistics, Abstract Algebra, and especially the Calculus. Topics include axioms of the real numbers, analytic geometry in several dimensions, sketching algebraic and transcendental functions, sequences, series, limits, and an introduction to the derivative and integral of the Calculus.

CREDIT: 1.04

GRADE: 12

PREREQ: Algebra I, II, Geometry, Trig

121 Algebra I

This course uses and expects its user to use set notations throughout. Sign numbers used in conjunction with equations and inequalities are stressed. Much time is devoted to solution of equations and inequalities using axioms. Fundamental operations with fractions, square roots, radicals, special products, and graphing consume about one-third of the course time.

CREDIT: 1.00

GRADE: 9,10,11,12

PREREQ: None

130 Algebra II

This course is a continuation of the material studied in Algebra I, but delving into each topic more deeply. Aside from the review of Algebra I, the course also delves into such topics as conic sections, quadratic functions, systems of quadratic equations, and some trigonometry. The main emphasis is placed on having the student recognize algebra as a study of the structure of the real and complex numbers and be able to recognize the operations within algebra and trigonometry as outgrowths from this structure.

CREDIT: 1.00

GRADE: 10,11,12

PREREQ: Algebra I

165 AP Calculus AB

This is a college level advanced placement course in the Calculus of one variable. Students taking this course are expected to sit for the Advanced Placement Calculus AB exam administered each May by the College Board. Students are expected to be proficient with advanced topics in algebra, trig, analytic geometry, complex numbers, elementary functions and the conics. The AP syllabus constitutes the course outline, includes properties of functions, limits, the derivative, integrals, and application of derivatives and integrals. Key theorems include the Mean-value Theorem and the Fundamental Theorems. A recommended average of 88% in Adv Math is needed to select this course.

CREDIT: 1.08

GRADE: 12

PREREQ: Recommended as Noted Above



140 Geometry

This course investigates the properties of plane figures and introduces mathematics as a pure science. Topics include: deductive and inductive reasoning, parallel lines, congruent and similar triangles, quadrilaterals, circles, and areas of plane figures.

CREDIT: 1.00 GRADE: 10,11,12 PREREQ: Algebra I

145 Honors Advanced Math

This course was established to support the new AP Math-AB (Calculus) by developing a repertoire of pre-calculus skills through an in-depth and rigorous study of elementary functions, general principles, and problem solving techniques found in mathematics. A minimum average of 88% in the Honors Math Track is recommended to schedule this course. It is recommended that the student maintain an 88% average or better to continue with AP Calculus.

CREDIT: 1.04 GRADE: 11 PREREQ: Honors Geometry-Trig

124 Honors Algebra II

This course is a continuation of the material studied in Algebra I but on a more advanced level. The main emphasis is placed on having the student recognize Algebra as a study of the structure of the real and complex number and to be able to recognize the operation within Algebra and Geometry as outgrowth from this structure. It is recommended that the student maintain an 88% or better in the Honors Math Track to continue with Honors Geometry-Trig in grade 10.

CREDIT: 1.04 GRADE: 9 PREREQ: Algebra I

125 Honors Geometry-Trig

This course is designed as part of an honors program in the area of mathematics. It is specifically a one year course covering the important topics within Geometry and Trigonometry. A minimum average of 88% in Honors Algebra II is recommended to schedule this course.

CREDIT: 1.04 GRADE: 10 PREREQ: Honors Algebra II

**122 Integrated Math I**

This is the first of four courses that has an increased emphasis on connecting a variety of interrelated math concepts to everyday experiences while engaging in the communication of mathematical ideas. Specific algebraic concepts for this course are computing with integers, graphing pairs of data in scatter plots and on coordinate planes, utilizing algebraic expressions, identifying and expressing functional relationships in a variety of forms, solving linear equations and inequalities algebraically, understanding slope and rate of change, and using slope and y-intercept to write linear equations and graph linear equations and linear inequalities.

CREDIT: 1.00

GRADE: 9

PREREQ: None

132 Integrated Math II

This is the second of the four courses as stated above. Specific algebraic concepts for this course are using absolute value in equations, functions, and inequalities, using square roots in simplification and in functions, computation of monomials and the use of scientific notation, computation of polynomials, factoring polynomials, graphing quadratic functions, and solving quadratic equations. Specific geometric concepts for this course are inductive and deductive reasoning skills, conditional statements and their converses, using logic, measuring segments and angles, using the idea of congruence, calculating distances and midpoints, exploring special angles, and working with parallel lines cut by transversals.

CREDIT: 1.00

GRADE: 10

PREREQ: None

160 Integrated Math III

This is the third of the four courses stated above. Specific probability and statistics concepts are finding theoretical and experimental probabilities, using simulation, calculating probabilities of types of events, random sampling, measure of central tendencies, standard deviations and z-scores, and the normal curve. Some specific geometric concepts are exploring isosceles and right triangles, using the Pythagorean Theorem and its converse, working with angle sums of quadrilaterals and polygons, lateral and surface areas and the volume of two-dimensional and three-dimensional geometric figures, similar polygons and triangles and completing deductive proofs of congruent and similar triangles and their parts.

CREDIT: 1.00

GRADE: 11

PREREQ: None

168 Integrated Math IV

This is the fourth of four courses that has an increased emphasis on connecting a variety of interrelated mathematical concepts to everyday experiences while engaging the learner in the communications of mathematical ideas. Specific algebra two concepts for this course are patterns, functions, the use of scatter plots and trend lines, coordinate plane graphing, linear equations and inequalities, absolute value equations, functions, and inequalities, solving systems of linear equations and inequalities, computation of matrices, arithmetic sequences and series, geometric sequences and series, real and complex number systems, and conic sections.

CREDIT: 1.00

GRADE: 12

PREREQ: None



172 Probability and Statistics

This course is highly recommended for students who are planning to seek a degree in the social sciences or who want to know how to correctly acquire data, how to analyze that data, and then to determine if the data suggests any significant relationships. In addition to being able to conduct quantitative research, the fundamentals of probability and the use of probability in making decisions will be studied. Students who need to take calculus while in college should not take this course in lieu of Trigonometry. Geometry may be taken concurrently.

CREDIT: 1.00 GRADE: 11,12 PREREQ: Algebra II, Geometry

164 SAT Math Prep

The emphasis in this course is twofold. Students will become familiar with the format of the math portion of the SATs and also learn test taking strategies. Class time will also be devoted to reviewing major concepts that are assessed on the exam. A small amount of time will be devoted to new math concepts such as exponential growth and decay and geometric probabilities. Students who elect this class should have already completed a second level algebra class and a geometry course or be taking a geometry course concurrently with this class.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Recommended as Noted Above

126 SIMMS Math I

This course is designed to develop a foundation for experiencing increased success in Algebra based mathematics. Algebraic content includes modeling math ideas through symbols, the identification and extension of patterns, analyzing rates of change, and developing a basis for solving equations. Minor content includes geometry principles such as relating right triangles, rates of change, and ratios. There is a high emphasis on problem solving and the development and testing of conjectures in this course.

CREDIT: 1.00 GRADE: 9 PREREQ: Administrative Assignment

127 SIMMS Math II

SIMMS Math II is designed to help students to become proficient on the 11th grade PSSA test. The course has a high emphasis on classroom activities that provide connections to previous math courses and also to everyday experiences. The course topics will provide students with the opportunity to learn the skills and problem solving strategies necessary to function as a worker and wise consumer in the 21st century. The topics for this course fall within the five interrelated categories of Numbers and Operations, Algebra, Geometry, Measurement, and Data Analysis and Probability.

CREDIT: 1.00 GRADE: 10 PREREQ: Administrative Assignment



150 Trig w/Selected Topics

This course involves a study of trigonometric and circular functions for the first one-half of the course. Emphasis will be placed on applications of trigonometry and the study of circular functions as an extension of the functions learned in Algebra II. The remainder of the year will be devoted to introductory concepts from probability, statistics, and calculus as further preparation for college mathematics.

CREDIT: 1.00

GRADE: 11,12

PREREQ: Algebra I, II, Geometry



Science Department

Faculty

Mr. Evans

Mr. Landis

Mrs. Musser

Mr. Hessert

Mr. Mann

Mr. Welker

265 Anatomy and Physiology

Anatomy and Physiology is a survey course on the structure and function of the organ systems that make up the human body.

CREDIT: 1.00

GRADE: 12

PREREQ: None

254 AP Biology

The Advanced Placement Biology course is to provide interested students with an opportunity to participate in a college-level experience in the high school, with the possibility of advanced placement and/or credits as they enter a college or university. Major biological themes include: chemical basis of life, metabolism of cells, genetic continuity, homeostasis in animals and plants, and how populations evolve and are part of ecosystems. All students are strongly urged to take the AP exam offered in May.

CREDIT: 1.08

GRADE: 11,12

PREREQ: Biology and Chemistry

256 AP Chemistry

This AP course offers further investigation into the science of chemistry and offers a more in-depth approach to the concepts learned in Chemistry. Topics include: thermo-chemistry, redox reactions, kinetics, equilibria, and acids/bases. An emphasis is placed on analytical laboratory experiments and problem solving. In conjunction with Chemistry, this course mirrors the concepts of a typical college level general chemistry course. Students are expected to take the AP exam in May. A grade of B or better is recommended in Chemistry.

CREDIT: 1.08

GRADE: 12

PREREQ: Chemistry

225 Applied Biology

Applied Biology is an applications oriented course that puts biological topics in perspective by relating them to the workplace, to a career in Science, or to personal life experiences. Problem solving, decision making, and hands on learning are emphasized while providing a Science foundation for curricula in areas of agriculture, home economics, health, and areas of trade and technologies.

CREDIT: 1.00

GRADE: 10

PREREQ: None



220 Biology

This course will attempt to give students a general introduction to the various facets of biology. Topics will include: biochemistry, energy, cells, variety and continuity, ecology, microbes, plants, and animals. Developing a positive interest in biology will be a major goal. This course will stress applying biology skills to everyday living. Every attempt will be made to show students that these biology skills are important and can be used during their entire lifetime.

CREDIT: 1.00 GRADE: 10 PREREQ: None

230 Chemistry

This is an introductory survey course designed primarily for the college-bound student. The student may expect to learn about the nature of matter: its properties, composition, structure, and changes. The course is both theoretical and mathematical in nature and includes a significant amount of laboratory work. A degree of mathematical ability is assumed and considerable emphasis is placed on problem solving.

CREDIT: 1.04 GRADE: 11 PREREQ: Algebra I

210 Earth Science

This course introduces the four “earth” sciences: Geology, Meteorology, Oceanography and Astronomy. Students electing the Honors option will focus on the governing principles of science and how to apply the scientific method to investigate each topic area.

CREDIT: 1.00 GRADE: 9 PREREQ: None

215 Honors Biology

This course is designed for the scientifically oriented student preparing to enter an institution of higher learning. A comprehensive survey of the basics biology will be presented within a molecular framework. Topics include: biochemistry, energy, cells, and animals. Ecology and conservation will be incorporated during the course. Most of the study will be theoretical but a significant amount of lab study is also included and lab reports will be required. The depth of content varies from the academic course and three independent projects will also be required. A minimum average of 88% in the previous year’s science is recommended to schedule this course.

CREDIT: 1.04 GRADE: 10 PREREQ: Recommended as Noted Above

205 Honors Earth Science

This course is identical to the Earth Science course with the following additional course work: (1) greater emphasis on analytical methods; (2) expanded technical reading and writing requirements; and, (3) an independent research project is required.

CREDIT: 1.04 GRADE: 9 PREREQ: None



260 Physics

This is a college-prep survey course that will introduce students to the major topics of physics. It is designed to build an understanding of a variety of physics concepts, show how they apply to everyday experience, and use them to solve problems. Topics will include mechanics (kinematics, forces, momentum and energy), the fundamental forces of nature (gravity, electricity, magnetism, nuclear), and waves (light and sound). The course will include demonstrations, labs, and projects. Knowledge of mathematical functions and trigonometry is helpful but not required.

CREDIT: 1.04 GRADE: 12 PREREQ: Algebra I

235 Practical Chemistry

This course will emphasize the conceptual aspects of chemical principles with a reduced emphasis on mathematical problem solving. The course will include laboratory activities to demonstrate and support concepts that are studied. Students intending to study a math or science related field in post-secondary education should not enroll in this course.

CREDIT: 1.00 GRADE: 11 PREREQ: None

240 Principles of Technology

The Principles of Technology course is designed to allow students to apply scientific principles in practical situations. The course will provide vocational and technical training in the following areas: force, work, rate, resistance, and energy, power, and force transformers. Students will use these principles, where applicable, in mechanical, fluid, electrical, and thermal systems.

CREDIT: 1.00 GRADE: 11 PREREQ: None



Social Studies Department

Faculty

Mrs. Berger
Mrs. Dressler

Mr. Fluman
Mr. Murray

Mr. Sumner
Mr. Sundberg
Mr. Zimmerman

300 American Cultures I

This is a full year course that combines the study of the United States from the establishment of Jamestown through Civil War Reconstruction. It emphasizes how the background issues helped shape the United States system of government. Students will examine what it means to be a citizen from a historical perspective that focuses on national, state, and local government systems. The students will gain an increased awareness of and responsibilities in our democratic society today.

CREDIT: 1.00

GRADE: 9

PREREQ: None

313 American Cultures II

This course is designed for students in tenth grade college prep curriculum. The companion course to American Cultures, the student will examine America's experience from the Post Reconstruction during the development of the Industrial Age (1800) to present day. Utilizing humanities based approach, students will be expected to research and complete formal writing assignments and projects in each marking period.

CREDIT: 1.00

GRADE: 10

PREREQ: None

315 American History Highlights

This course is designed for students in the tenth grade tech prep curriculum. Utilizing a cultural literacy approach, sophomores will examine a broad scope of political, economic, and social events in America's experience from the Post Reconstruction during the development of the Industrial Age (1880) to present day.

CREDIT: 1.00

GRADE: 10

PREREQ: None

332 AP European History

In this advanced placement course students will be working with college-level materials from primary, secondary, and tertiary sources. The course requires extensive individual and small-group research and formal essays. Successful students will be REQUIRED to sit for the AP exam administered by the College Board in May. The span and focus of history discussed in the seminar-style class is Western Society since 1300; therefore, the pace is rapid and the content is challenging. The course outline is determined by the AP syllabus. Recommended prerequisites: Honors American Cultures I and Honors American Cultures II with a minimum of 88% for grades 9 and 10 social studies courses to schedule this course.

CREDIT: 1.08

GRADE: 11

PREREQ: Recommended as Noted Above



344 Constitutional Issues

This course provides study in the American political culture, values, and principles basic to American constitutional democracy. A study of political theory and governmental structure at the federal, state, and local levels provide foundation for applied study in the areas of personal, political, and economic rights and the responsibilities of participants in the civic arena.

CREDIT: 1.00 GRADE: 12 PREREQ: None

330 Consumer Economics

This course for 11th grade students is designed to provide each student with an understanding of economics utilizing the basic money management and practical knowledge skills necessary to be a productive member in our society. Some topics that are covered include credit, savings and checking accounts, purchasing a car, renting an apartment or house, income taxes, insurance's, local government operations, contracts, warranties, and wills. A variety of real life activities will help each student reach the goals of this course.

CREDIT: 1.00 GRADE: 11 PREREQ: None

320 Economics

Economics is a full year course that deals with the basic economic problem of scarcity and how society reacts to limited resources versus unlimited wants. Economics is concerned with the behavior of individuals and institutions engaged in the production, exchange and consumption of goods and services. The study of economics will include the basic knowledge of the characteristics of economic systems, how markets establish prices, how scarcity and choice affect the allocation of resources, the global nature of economic interdependence and how work and earnings impact productivity. This course will also focus on how students can successfully enter the work world and make better decisions about money, spending and investments.

CREDIT: 1.00 GRADE: 11 PREREQ: None

338 Global Issues

This full year course is designed for students in the 11th grade tech prep curriculum. Emphasis will be placed on examining the major international events of the 20th century. Students will examine the world conflicts (World War I & II), Cold war conflicts (Korea and Vietnam), and recent events that have transpired since the end of the Cold War. The approach will be topical and "current," asking students to apply the knowledge they gain from studying past experiences to the international problems of today's world.

CREDIT: 1.00 GRADE: 11 PREREQ: None



305 Honors American Cultures I

This is a full year course that covers the same content as American Cultures I. This course offers a more in-depth approach with additional research and writing assignments. Students must be able to work independently and possess discipline study skills. A minimum average of 88% in the 8th grade social studies course is recommended to schedule this course.

CREDIT: 1.04

GRADE: 9

PREREQ: Recommended as Noted Above

317 Honors American Cultures II

This course is designed for students in tenth grade college prep curriculum. The student will examine America's experiences from the Post Reconstruction during the development of the Industrial Age (1880) to present day. Utilizing humanities based approach, students will be expected to research and complete formal assignments, complete in-depth projects, and must be able to work independently and possess disciplined study skills. A recommended average of 90% in American Cultures I is recommended to schedule this course.

CREDIT: 1.04

GRADE: 10

PREREQ: Recommended as Noted Above

340 Psychology/Government

One semester of this course is an explanation of the basic workings of government from a federal, state, and local perspective. Basic constitutional rights will be also examined. It will allow students to prepare to actively participate in our governmental system. The Psychology semester will center on theories and principles of human development and behavior. In applying these principles to realistic social interactions and hands on activities, this course provides a basis for students to build upon in future study.

CREDIT: 1.00

GRADE: 12

PREREQ: None

335 World Cultures

This full year course develops student awareness of the world around them. Students will develop an awareness of, and an appreciation for, the various regions of the earth and the cultures that inhabit them. Emphasis will be placed on 20th century developments that have helped to create today's international political, economic, and social systems. Special care will be taken to allow students to develop their ability to synthesize presented materials so as to gain an appreciation for their role in the international community of nations.

CREDIT: 1.00

GRADE: 11

PREREQ: None



Health, Safety, and Physical Education Department

Faculty Mrs. Beckley	Mr. Church	Mr. Manotti Mr. Reilly
--------------------------------	------------	---------------------------

375 Adapted Physical Education

The purpose of the Adapted Physical Education Program in the Mifflinburg Area School District must include the thought that all pupils, regardless of their impairment, should have the opportunity to participate in physical education learning experiences. Through competent leadership, a diversified program of developmental activities, games, sports, exercises and rhythms suited to the interests, capacities and limitations of students with physical impairments and disabilities who may not safely or with successfully engage in unrestricted vigorous activities of the general physical education program.

CREDIT: Varied GRADE: 9,10,11,12 PREREQ: None

366 Current Issues in Health

This course would look at issues currently popular in Health and Health Education. It would consist of research on such topics. Newspapers, magazines, and news reports would be our textbooks. This course would appeal to anyone thinking of entering a health field.

CREDIT: .50 GRADE: 10,11,12 PREREQ: 9th Grade Health

358 Driver Safety Education

Students enrolled in this course meet three times in a six day cycle for half of the year. The first aim is to develop good driver attitudes. Secondly, an understanding of the laws, both man-made and nature-made, is a goal. The third goal is to develop as much as possible an understanding of the skills and mechanics of driving. As a fourth aim, it is hoped that the students receive at least an elementary understanding of the mechanical operation of an automobile, and some idea of the maintenance necessary for the vehicle.

CREDIT: .25 GRADE: 10 PREREQ: None

365 First Aid/CPR/AED Training

People need to know what to do in an emergency situation before medical help arrives. Since you may be faced with an emergency in your lifetime, it's important that you know how to recognize an emergency and how to respond. The intent of this course is to help people feel more confident of their ability to act appropriately in the event of an emergency.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None



350 Health

This course is designed for all ninth grade students and any other students who have not had a high school level health education course. The course concentrates on students learning how to make responsible, healthy decisions. Units which are covered include: decision making, violence, relationships and family, understanding medicines/drugs and alcohol, mental/emotional health, human sexuality, and food and fitness.

CREDIT: .35 GRADE: 9 PREREQ: None

360 Physical Education

This course is required by the state and the district for all students grades 9-12 throughout their four years in high school. It is the intention of the department to create a wholesome learning atmosphere, to stimulate participation in vigorous play and to project knowledge of games, sports and other lifetime activities through skills and supervised practice.

CREDIT: Varied GRADE: 9,10,11,12 PREREQ: None

370 Weight Training I

This course is designed for any student who is interested in learning basic techniques and safety in weight training. Knowledge of these basic strategies will enhance their total fitness and strength.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

371 Weight Training II

This course is designed for any student who has a serious interest in continuing their knowledge in weight training strategies. Students will be expected to create programs, keep logs and evaluate programs being used during class time. Intensity and full participation is expected from all students.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Weight Training I



Arts and Humanities

Faculty			
Mrs. Koch	Mr. Wagner	Mrs. Wagner	

500 Adv Pottery

The course is designed for students who have already taken the Introductory Pottery course, have shown strong motivation and good craftsmanship in pottery making, and would like to develop their skills to a higher degree. Only a few students will be approved since the course is taken along with beginning pottery students.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: Pottery

505 Art Aesthetics

This course takes a look at art from the standpoint of history, local and world-wide, and appreciation for the arts. Some drawing and painting experiences will be included. Various texts, tapes, prints and slides may be used throughout the course. This program will provide a background for potential students in the arts beyond high school, but it is available to any interested students.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

530 Concert Choir

This course is a music performance class for the singer. Students will explore singing various types of music, literature, musical terminology, notation, and vocal technique as well as singing in various ensemble settings. Every student is required to participate in small group lessons called Vocal Labs once a 6-day cycle. These labs are designed to provide for the development of individual vocal skills and musical concepts that are studied and used in solo and ensemble music. An AUDITION for entrance into this ensemble is required for all students each year. The following are required: Winter Concert, Pops Concert, Christkindle Market, Spring Concert, Baccalaureate and Commencement.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Audition

510 Drawing & Painting

This course explores fundamentals of art and design through the use of elements and principles. Students develop skill in the use of techniques of various mediums, while producing a variety of projects from preliminary studies. Subject units are viewed as an extension of the basic fundamentals of figure drawing, still life, and color theory, use of the design principles of arrangement, plus the use of painting and other advanced art mediums. Art history and art criticism will be included in the process of art production. Some out of class work will consist of scheduled sketchbook assignments.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None



536 Mar-Cncrt Band-Cncrt Choir

This course is designed for students who wish to participate in both band and choir. Students alternately attend band and choral rehearsals. See course descriptions above for more detail. This course requires evening rehearsals.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Band-Choir Audition

540 Music Appreciation

This course is designed to enhance the experience of listening to music and increase awareness of the diversity of musical styles. Study will include a survey of music from the Medieval/Renaissance, Baroque, Classical, and Romantic, and 20th Century style periods.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

542 Music Keyboarding

This class is an introduction to basic keyboard performance including basic musical skills, keyboard technique, and exploration of various types of keyboard literature. Further study for the advanced student will include harmonization and improvisation using acoustic and electronic keyboards. Students will also explore keyboard literature, composers and performers.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

550 Music Theory I

This course is a study of basic harmony, form, and analysis. It includes a development of sight reading and ear training skills using solfeggio (sight singing). This course is recommended especially for a student planning a career in music.

CREDIT: .50 GRADE: 11,12 PREREQ: Permission by the Instructor

551 Music Theory II

This course is an extension of Music Theory I and includes advanced study of harmony, form, and analysis. Students also study arranging utilizing the Finale software program. This course is recommended especially for students planning a career in music.

CREDIT: .50 GRADE: 11,12 PREREQ: Theory I or Instructor Permission



515 Painting

Students are required to paint in various media. Watercolors, oil paints, and tempera paints are experienced in the course. Various techniques are explored and development of an individual style is encouraged. Appreciation is introduced through films, examples, discussions and texts.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

518 Portfolio Art

This course is designed to assist students interested in art with the intent of attending art school. Time is spent on developing stronger skills and a level of higher order thinking. Various media will be explored. Proper mounting and framing procedures for presentation to art schools, or art related industry, will be demonstrated.

CREDIT: .50 GRADE: 11,12 PREREQ: Drawing & Painting

520 Pottery

This course exposes students to the various hand-built methods of constructing clay forms including: coil forms, slab ware forms, draped pieces, and combinations of these. Wheel throwing is also incorporated with this course. Design and balance are also stressed, as well as appreciation of good pottery forms. Pieces are bisque and glaze fired.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

522 Pottery & Sculpture

This course is offered to students interested in working with clay, and it combines the making of clay pots with the creation of 3-dimension sculpture. All works will be glazed and fired upon their completion. Roughly, half of the course will be spent on sculpting clay, and half of the time will be devoted to the making of clay vessels and pots.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

525 Sculpture & Crafts

This course deals with design in 3-dimensional materials. Spatial relationships are stressed. Various experiences are provided using such materials as clay, wood, cardboard, plaster, string, wire, found objects, etc. Various projects may be created, such as figures, heads, models, abstract forms, etc.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None



Technology Education/Family and Consumer Sciences/Food Services/Business Education/Agriculture Educations

Faculty		
Mr. Beveridge	Mrs. Finck	Mr. Kessler
Mrs. Cover	Mr. Flook	Mr. Mack
Mr. DeFacis	Mrs. Hobbins	Mr. Spangler

443 Accounting I

This course explores careers in accounting and presents ten commonly accepted accounting concepts. Students learn how to start an accounting system, how to analyze transactions into debit and credit parts, how to journalize and post business transactions and how to plan adjustments on a worksheet and complete end-of-fiscal-period work for a proprietorship. Students are introduced to an automated accounting system and learn how to automate the accounting cycle for a small service business organized as a partnership.

CREDIT: 1.00 GRADE: 11 PREREQ: None

445 Accounting II

This course presents the accounting cycle for a merchandising business organized as a partnership as well as the accounting cycle for a merchandising business organized as a corporation. Students drill on the selected specialized activities performed by entry-level accounting employees. They are introduced to a voucher system, a petty cash system, and an inventory system. Automated spreadsheet accounting is presented to enable students to learn how electronic spreadsheets function.

CREDIT: 1.00 GRADE: 12 PREREQ: Accounting I

420 Adv Computer Applications

This is a semester course designed to inspect many advanced topics within today's popular software applications. Word processing, spreadsheets, database management, desktop publishing, multi-media presentation, and Internet navigation are among the topics of discussion. Basic and fundamental knowledge of the aforementioned computer applications is required.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Computer Keyboarding-Applications

490 Adv Computer Keyboarding

Advanced Computer-Keyboarding is the second semester of Computer Keyboarding-Applications. Students will strive to increase their speed and to improve their keyboarding technique patterns. They will also review and improve their formatting skills on memos, letters, reports, and tables.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Computer Keyboarding-Applications



710 Adv Drafting I, II, III, IV

An 18-week study in engineering and/or architectural drafting, available to students who have completed basic Engineering and/or Architectural Drafting. Material covered will be more advanced and may include new areas such as working drawings, exploded views, perspective heat loss studies, support calculations and computer aided drafting.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Engineering or Architectural Drafting

555 Adv Family Science I, II, III, IV

This is an advanced class for students who have had experience and are interested in learning more about child development or textiles and related careers. Students are provided the guidance and facilities needed to pursue individual study in these areas. Students are encouraged to select individual projects related to child development or textiles.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Previous Family Sciences

693 Adv FFA Project

This course is designed to teach leadership skills to FFA members. The student must be a member of the Mifflinburg FFA chapter and should be in a leadership position or committee chairman. Students will work on various leadership development projects that will include, but are not limited to: public speaking, demonstration, various exhibits or displays, reports, and presentations. Students will record the skills and projects learned as they explore the changing agricultural technologies.

CREDIT: .50 GRADE: 11,12 PREREQ: Previous agriculture classes

560 Adv Food Service I, II, III, IV

This is an advanced class for students interested in continuing their education in various areas and applications of foods and the Food Service industry. This class builds upon prior learning in foods classes and requires the student's ability to carefully follow directions and work independently. Students must have taken Intro to Food Services, Food Power, and Foods of the World.

CREDIT: .50 GRADE: 11,12 PREREQ: Recommended as Noted Above

700 Adv Industrial Materials I, II, III, IV

This course covers a review of power equipment, hand tools, lab procedures and lab safety. Students will work on advanced studies of their choice. Project selection is open to the student (subject to instructor approval). Areas of instruction will generally be individual rather than class oriented.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Wood Technology or Metal Fabrication



426 Adv MS Publisher

Adv MS Publisher applies skills developed from Microsoft “Publisher” class to real world situations. Students will prepare desktop publishing publications from “scratch” utilizing MS Publisher software.

CREDIT: .50 GRADE: 10,11,12 PREREQ: MS Publisher

346 Adv Multi-Media I, II, III

The course presents advanced elements of video production and the incorporation of multimedia elements such as graphics, particularly computer-based graphics. Advanced elements are taught primarily through hands-on experience in the production of the daily, live, news-like announcements, as well as through the production of short and medium-length video subjects. Students will receive academic training and practical experience in all aspects of video production while making a wide variety of short and medium-length videos, such as educational videos, commercials, public service announcements, and features.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Multi-Media

691 Adv Plant Science

This course is designed for a self-motivated student with an interest in plant science. The student will be required to manage sections of the greenhouse and conduct various plant science experiments. The student must also design and conduct an experiment that will meet the guidelines of the National FFA Agricultural Science Fair. The student will also be able to identify numerous plants based on student interest areas of the student and develop a power point type presentation to be used for future identification. The student must have obtained at least an 88% average in the Plant & Soil Science, Ag Education II, Ag Science, or Horticulture course. Students will record the skills and experiment procedures.

CREDIT: .50 GRADE: 11,12 PREREQ: Recommended as Noted Above

720 Adv Power Tech I, II, III, IV

This course covers a review of power equipment, and tools, lab procedures and lab safety. Students will work on advanced studies of their choice. Project selection is open to the student (subject to instructor approval). Areas of instruction will generally be individual rather than class oriented.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Power Technology or Elec-Electronics



082 Adv Project

This course is designed for students who wish to pursue an individual project or area which is beyond the scope of a particular course or curricular area. It is generally an elective course that is offered to our students, but the student has already advanced beyond the scope of the course.

CREDIT: .50 GRADE: 11,12 PREREQ: Principal's Approval Required

600 Adv Welding

This course provides for the development of additional and advanced welding skills in the areas of stick arc welding, MIG welding, gas braising and cutting, and some TIG skills. The student will be required to design and construct a welding project and complete forms for the James F. Lincoln Arc Welding Foundation as part of the course work. The student must be able to work independently. A prerequisite for the course is one of the following: Ag Education II, Elective Ag with Welding, Masonry & Welding, or Welding & Plumbing. A minimum average of 88% in an agricultural welding course in the welding portion is recommended to schedule this course.

CREDIT: .50 GRADE: 11,12 PREREQ: Recommended as Noted Above

605 Ag Construction

This course provides an introduction to the construction industry with an emphasis in framed buildings. Students will study building design, carpentry, layout, and framing. Teams of students will construct a model building to scale while learning the parts and determine bills of materials. Students will also learn the principles of assembly line production with a class project to construct tables or similar items. A review of simple surveying practices needed for construction will be included along with an introduction to landscaping and irrigation considerations at the construction site. Students will record their skills and tasks performed as if it were an actual job site.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

608 Ag Engines & Tractors

The major emphasis of this course is the repair and overhaul of engines, tractors and their components. Actual content will depend on the student's interest and the required work to the engine or equipment needing the work. For successful completion of this course, the student or student partner must obtain a multi-cylinder engine or tractor on which to work. Instruction will be given on the preparation for and how to spray paint equipment. Students are responsible for the cost of all materials used. If time is available, students will assemble large construction projects and be introduced to ropework. Students will record their skills and tasks performed as they are performed in the shop.

CREDIT: .50 GRADE: 10,11,12 PREREQ: Engines



612 Ag Products & Services

This course provides instruction in the fields of computer use in agriculture, money and tax management skills, crops, agricultural products, chain saws, fencing, and food science. Students will research and record the skills as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

615 Agricultural Mechanics I

This course provides hands-on instruction in concrete, masonry, welding, electricity, electric motors, plumbing, water systems, and tool fitting. Students will demonstrate practical skills in these areas and should have a willingness to study some mechanical theory. Students will record skills or other records as they explore the changing agriculture technologies.

CREDIT: 1.00 GRADE: 10,11,12 PREREQ: None

620 Agricultural Mechanics II

This course provides hands-on instruction and the theory of the small air-cooled gasoline and water-cooled diesel engines, ropework, plus an introduction to carpentry, and building construction. Students must be willing to provide small gasoline engines during the second marking period. Students will record skills as they explore the changing agriculture technologies.

CREDIT: 1.00 GRADE: 11,12 PREREQ: None

621 Agricultural Mechanics III

This course provides hands-on instruction on equipment maintenance, larger engine and/or tractor overhaul, hydraulics and pneumatics, and time for independent study. Shop projects are to be approved by the instructor. The student must be willing to provide equipment, engines, tractors, and/or independent study project for the shop and pay all expenses associated with the projects. Students will record the skills and projects learned as they explore the changing agriculture technologies.

CREDIT: 1.00 GRADE: 11,12 PREREQ: Previous Agriculture Classes

622 Agricultural Technology I

This course provides instruction in the fields of soil science and use and agricultural mechanics theory. Major emphasis will be placed on understanding concrete, masonry, electricity, electric motors, welding theories, metal work, GPS & GIS shop ethics, reference use, surveying, and land measurement devices, and bill of materials. Students will record skills or other records as they explore the changing agriculture technologies.

CREDIT: 1.00 GRADE: 10,11,12 PREREQ: None



625 Agricultural Technology II

This course provides instruction in fencing, chain saw safety, sales, apiculture, livestock, crops, money and tax management skills, computerized records, food science, and agricultural careers and opportunities in the FFA. Students will record skills or other records as they explore the changing agriculture technologies.

CREDIT: 1.00 GRADE: 11,12 PREREQ: None

630 Agriculture Education I

This course provides an introduction in the various plant and animal sciences, leadership opportunities offered by the FFA, recordkeeping and agriculture technologies. Students have the opportunity to individualize their instruction by selecting various instructional units. The agriculture mechanics or shop work stresses the safe use of hand and power tools and equipment. Students selecting the course for two periods are able to complete more instructional areas.

CREDIT: 1.00/2.00 GRADE: 9 PREREQ: None

634 Agriculture Education II

This course provides instruction in the agricultural sciences or agricultural mechanics fields along with leadership opportunities in the FFA. Students enrolling in this course will select either a natural resource/ag science option or an agricultural mechanics option at the beginning of the course. Shop units will cover welding, electricity, plumbing, masonry, and tool fitting. Classroom studies for students selecting the natural resource/ag science option will include plant, soil, and animal sciences. Students selecting the mechanics option will receive additional studies related to welding, concrete and masonry, surveying and building layout, and the use of various maps and plans for construction.

CREDIT: 1.00/2.00 GRADE: 10 PREREQ: None

637 Agriculture Education III

This course provides instruction in the various agricultural and/or environmental sciences, and agricultural mechanics. Students may select an environmental, agricultural production and produces, or agricultural mechanics option. The ag mechanics option is especially designed for students interested in one of the mechanics type classes offered at the SUN Area Career & Technology Center. Students are given leadership opportunities within the FFA, will improve recordkeeping skills, and explore the new agriculture technologies.

CREDIT: 1.00/2.00 GRADE: 11 PREREQ: None



642 Agriculture Education IV

This course provides instruction in the fields of advanced high school agriculture. Stress will be placed on individual shop and classroom projects. Problem solving, management, hydraulics, pneumatics, and career opportunities will be emphasized. Students will record skills as they explore the changing agriculture technologies.

CREDIT: 1.00/2.00 GRADE: 12 PREREQ: Previous Agriculture Classes

610 Agriculture Science

This course provides instruction in the areas of plant, soil, and animal sciences. During the first half of the course, emphasis will be placed on plant and tree growth and identification, and soil science. Students will complete class work in the greenhouse and outdoor lab. Later the emphasis will be placed on small and large animal nutrition, genetics and reproduction and chemicals as well as some of the changing agriculture technologies. Students will have the option to become involved in the FFA activities and take the official Pennsylvania test to become a licensed Private Pesticide Applicator.

CREDIT: 1.00 GRADE: 10,11,12 PREREQ: None

647 Animal Agriculture

This course provides classroom/laboratory instruction in the fields of animal management, fencing, chain saw safety, crops, apiculture, natural resources, and management. Students will record skills, be able to be involved in the FFA and explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

650 Animal Science

This course provides classroom/laboratory instruction in the fields of animal management, fencing, crops, apiculture, natural resources and management. Students are given leadership opportunities within the FFA, and explore the new agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

672 Animals in the Environment

This course explores the relationship between man and animals as Pennsylvania develops into a more urban environment. Approximately half of the course will deal with the relationships and needs of urban domesticated animals such as horses, dogs, and other companion animals. The other half of the course will deal with the interactions of wildlife and man as we change the environment. The actual course materials and animals discussed will be based partly on the student interest within the class. Students will record their skills and findings as they explore the changing animal agriculture and environmental technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None



770 Applied Fine Arts

This semester course is designed to give students a meaningful exposure to the family and consumer sciences, and the industrial and power technologies.

CREDIT: .50 GRADE: 9 PREREQ: None

730 Architectural Drafting

Residential architecture is an 18-week course offered as it relates to the student as a potential builder or buyer. A broad spectrum of architecture is studied. A partial set of house plans are developed by each student. There will be exposure to computer aided drafting.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

565 Child Development I (Prenatal-Newborn)

This is a semester course designed to teach about children from prenatal states to newborn. Family life, parenting and stages of development will be studied. A day care lab will be included.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

566 Child Development II (Infant-12 Yrs)

This is a semester course designed to teach about children from the infant stage to school age. The course emphasizes learning about, understanding and caring for, children of this age. The stages of development, parenting, discipline, and jobs in child care will be studied. Nursery school experience is included.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

572 Clothing & Textiles

Emphasis in this course will be on improving personal appearance including developing good habits of clothing care and storage, increasing consumer competence through careful selection, and acquiring basic skills in simple clothing construction.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

415 Computer Keyboarding-Applications

This is an introductory course in the applications of the computer and its software. Once all students have been exposed to the proper techniques of keyboarding and have been provided the basic skills to acquire reasonable keyboarding speed and accuracy, they will be exposed to various computer applications, including word processing, data base management and spreadsheets. Students will use a computer and other hardware peripherals for form documents, store information, and perform calculations.

CREDIT: .50 GRADE: 9 PREREQ: None



180 Computer Programming

Emphasis on this course will be placed on developing a vocabulary in the BASIC programming language and using deductive reasoning and problem-solving skills to develop top-down and modular computer programs. These programs will meet many tasks such as: forming text and graphic screens, sorting alphabetic and numeric information, and emulating simple games. Students taking this course should be those who, having previously taken an introductory course in computer applications, have developed a sincere interest in learning more about the computer, its' hardware, and its' processes.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: Computer Apps/Adv Applications

652 Construction Skills

The course provides instruction in the areas of basic electricity, controls, plumbing, water systems and tool fitting. Students will complete wiring exercises and be required to supply and fit and/or sharpen various tools of their choice. Students will record skills as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

738 Digital Electronics

An exploratory course in the basics of number systems, logic gates, adders, flip-flops and their applications into digital devices. Games, robotics, digital photography and related flight trainers and driving programs are studied. Strong, proven skills in math and electronics are very desirable. Students will be charged for materials.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

657 Elective Agriculture I

This course provides introduction to the various plant and animal sciences, leadership opportunities offered by the FFA, recordkeeping and agriculture technologies. Students have the opportunity to individualize their instruction by selected various instructional units and is directed towards students that have an interest in post secondary education. The agriculture mechanics or shop work stresses the safe use of hand and power tools and equipment.

CREDIT: 1.00 GRADE: 9 PREREQ: None

662 Elective Agriculture II

This course provides a wide range of topics within the agricultural industry. Students will usually be able to select between a classroom and shop type unit at various times throughout the year. Instruction is directed towards students having an interest in post secondary or technical education in agriculture or mechanics. Students will keep records, develop leadership skills through FFA as they explore the changing agriculture technologies. This course is approved for enrichment students.

CREDIT: 1.00 GRADE: 10 PREREQ: None



665 Elective Agriculture III

This course provides a wide range of topics within the agricultural industry. Students will usually be able to select between a classroom and shop type unit at various times throughout the year. Instruction is directed towards students having an interest in post secondary or technical education in agriculture or mechanics. Students will keep records; develop leadership skills through FFA as they explore the changing agriculture technologies. This course is approved for enrichment students.

CREDIT: 1.00 GRADE: 11 PREREQ: None

667 Elective Agriculture IV

This course provides a wide range of topics within the agricultural industry. Students will usually be able to select between a classroom and shop type unit at various times throughout the year. Instruction is directed towards students having an interest in post secondary or technical education in agriculture or mechanics. Students will keep records; develop leadership skills through FFA as they explore the changing agriculture technologies. This course is approved for enrichment students. Students participating in SUN ATS co-op may convert to .50 credits.

CREDIT: 1.00 GRADE: 12 PREREQ: None

736 Electricity-Electronics

This is an 18-week introduction to the field of electronics covering resistance, voltage, current, wattage in both DC and AC circuits. Time will be divided among lecture, laboratory experiments, and course projects. The project may be designed completely by the student or from an approved kit. Repair work on approved electronic devices is also possible. Students will be charged for materials.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

726 Engineering Design – 1

This course teaches problem-solving skills using a design development process. Models of product solutions are created and analyzed and communicated using 3D solid modeling computer design software. This course helps students understand the field of engineering/engineering technology.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

723 Engineering Design – 2

This course is a continuation of Engineering Design – 1. It utilizes 3D solid modeling computer design software. This course helps students understand the field of engineering/engineering technology.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: Engineering Design – 1



733 Engineering Drafting

This is an 18-week introductory course to the field of Engineering Drafting. Focus will be placed on orthographic, isometric, oblique, sectioning and auxiliary views. There will be exposure to computer aided drafting.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

724 Engineering Principles EDS

One of two courses that helps students to understand the field of engineering/engineering technology. Exploring engineering, the design process and a variety of engineering systems students learn how engineers and technicians use math, science and technology to solve problems to benefit people. Concerns about social and political consequences of technological change are also addressed.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: Algebra I

725 Engineering Principles SSM

One of two courses that helps students to understand the field of engineering/engineering technology. Exploring static, strength and properties of materials, and motion students learn how engineers and technicians use math, science and technology to solve problems to benefit people. Concerns about social and political consequences of technological change are also addressed.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: Algebra I

670 Engines

This course provides instruction in small 4-cycle air-cooled gasoline engines. Students will study theory of the 2-cycle, 4-cycle gasoline and diesel engines. Students will troubleshoot, disassemble, measure, and reassemble school owned air-cooled engines. Students must supply and work on their own small air-cooled engine. If the student exhibits the skills and interest they may complete introductory work on school owned diesel engines. Students must cover the costs of any repairs or parts to their engines. Students will record skills as they complete shop work and explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

435 Entertainment Marketing

Sports and entertainment topics are used as the foundation for teaching marketing concepts. Each marketing function is incorporated throughout the curriculum and is highlighted to indicate how it is used in the marketing process. Topics such as marketing products and services through sports, public images, marketing entertainment, and legal issues for sports and entertainment marketing will be discussed.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None



485 Entrepreneurship

This course focuses on understanding the economic principles that influence business decisions; helps students understand the need for ethical standards for business leaders, producers, and consumers; and enables students to explore career opportunities, consumer issues, and other aspects of personal economics. This course will provide hands-on experiences in the operation of a business enterprise. Students will also have regular contact with a member of the business community.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

673 Environmental Mechanics

This course provides hands-on instruction in the fields of outdoor environmental skills followed by time to complete an individual project(s). Course work will include work with GPS and surveying, fencing, and the use of the chain saw. Students must be prepared to work outside in a laboratory setting in various weather conditions during the first marking period. During the second marking period, students will be required to complete a skills project based on their individual interests and abilities. Students will record skills or other records as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

603 Environmental & Construction Skills

This course provides hands-on instruction in the fields of environmental and mechanical skills used in the outdoors. Course work will include work with GPS units and GIS equipment if it is made available by the district. Students will use surveying equipment, maps, soil surveys, and compasses as used in both the environmental and construction fields. Students must be prepared to work outside in a laboratory setting in various weather conditions. Students will record skills or other records as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

675 Environmental Education

This course provides instruction in the fields of land use management, small woodlot forestry, water resources and quality, aquatics, aquaculture, hydroponics, and wildlife. Students will work with fish tanks and local water sources to study water quality. Students will record skills and/or findings as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

677 Environmental Resources

This course provides instruction in the fields of natural resource management, aquaculture, recycling, chain saw safety, and apiculture. Students will often work in an outdoor laboratory setting as well as the classroom. Students will record skills and/or findings as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None



680 Environmental Science

This course provides instruction in the broad fields of natural resource use and management. During the year, students will study wildlife, forestry, chain saws, land use, apiculture, water resources and quality, aquatics, aquaculture, and hydroponics. Students will work in the classroom, laboratory, and outdoors. Students electing this course will be given management responsibility for the school fish tanks, possible aquatics work and water quality studies. Students will record skills or findings as they explore the changing agriculture technologies.

CREDIT: 1.00 GRADE: 10,11,12 PREREQ: None

433 Fashion Marketing

Fashion Marketing covers the marketing curriculum using the fashion industry as the learning vehicle. Discussing topics such as fashion cycle, fashion economics, promoting a fashion image, and technology in fashion marketing, this course gives a perspective on how marketing shapes the future of the fashion industry and possible career opportunities.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

595 Family & Consumer Wellness

The Family and Consumer Wellness course provides information to students about family issues and how they relate to individuals. It explores careers in the health care area and explores characteristics necessary for a health care provider. Various community resources including guest speakers will be used to teach this course.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

580 Food Power

In this course students will learn basic food preparation skills to use throughout their lives. They will gain a fundamental knowledge of the various foods included in the 5 food groups and will learn how to select, store, prepare and serve these foods. Nutrient information for each food group will be emphasized. Food labs will provide the experience to apply what is learned.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

586 Foods of the World

In this course students will relate both history and geography to the area of foods as they study food and food customs throughout the world. Emphasis will be placed on immigrant influences, land and climate as it relates to regional cuisine in the United States. Students will also be exposed to the food customs and cuisine of a variety of foreign countries.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None



682 Horticulture

This course is designed to give students an introduction to the horticultural field. Students will grow plants and work in the greenhouse. They will also work with plant designs, floral designs, and bonsai construction and growth. Instruction will include an introduction to hydroponics and soils.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

185 Independent Programming I

This is an advanced course in computer programming and should be taken only by those who have developed a wide vocabulary in the Visual Basic programming language. Advanced features of Visual Basic will be discussed such as: file management, data management, Active X controls, and Visual Basic programming for the Internet. Students will work independently. Books, software, and reference web sites are provided for the student. Personal assistance from the instructor is available by appointment.

CREDIT: .50 GRADE: 11,12 PREREQ: Computer Programming

190 Independent Programming II

This is an advanced course in computer programming and should be taken only by those who have developed a wide vocabulary in the Visual Basic programming language. This course focuses on making you productive with Visual C++. Students will work independently. Books, software, and reference web sites are provided for the student. Personal assistance from the instructor is available by appointment.

CREDIT: .50 GRADE: 11,12 PREREQ: Independent Programming I

588 Intro to Family Sciences

Intro to Family Sciences is a semester course open to all students; designed to be a comprehensive study of all aspects of family life. Study of the uniqueness of the individual, relationships, families, child development, child care, and management of resources will be emphasized.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

589 Intro to Food Services

In this course students will be introduced to one of the largest industries in the United States – the Food Service industry. They will explore the wide variety of careers available and then go on to experience what is involved behind the scenes of the industry as they learn about careers, nutrition, menu planning, marketing, sanitation, safety, and methods of food preparation.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None



671 Landscaping

This course provides both classroom and hands-on instruction in the field of landscaping. Instruction will be given on design; indoor and outdoor plant selection, care and planting, landscaping materials and water gardens. Actual class work will depend upon the project(s) available to the class that are close to the school grounds. Students must be prepared to work outside in a laboratory setting during certain times of the course. Students will record skills or other records as they explore the changing agriculture and landscaping technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

590 Living Independently

In this course students will complete a realistic job search to find a desirable career and practice basic skills necessary to get and keep a job. Students will then go on to manage their finances and apply budgeting skills as they learn about the areas of housing, foods, insurance, transportation, clothing, entertainment, and other areas of life they will face when living independently.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

685 Masonry and Electricity

This course provides instruction in the areas of concrete, masonry, and electricity. Students will study theory, practice and demonstrate skills related to concrete and masonry and basic electrical wiring and circuits that would be found in homes. Students will record their learned skills as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

687 Masonry and Welding

This course provides instruction in the areas of concrete, masonry, and welding. Students will demonstrate and practice concrete and masonry skills, arc metal, plastic, MIG welding skills, and Oxy-fuel welding/cutting skills. Students will record skills as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

614 Mechanical Theory & Technology

This course provides instruction in various ag mechanics fields. Both theory and hands-on application will emphasize knowledge in the areas of concrete, masonry, electricity, motors and controls, welding, shop ethics, and reference use. This course will offer the most to the students if they are enrolled in one of the ag shop courses dealing with these topics. Students will record skills or other records as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None



746 Metal Fabrication

This course is an introduction to metalworking, metalworking machinery and hand tools. Areas of instruction include casting, welding, machining, forging and heat treating, general project construction, and finish operations. Project selection is limited.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

425 MS Publisher

Students will learn to create and edit newsletters, brochures, business cards, forms, flyers, etc. using Microsoft Publisher. Students will learn when and how to use Publisher for work, school, and personal activities.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

345 Multi-Media

The course presents the basic elements of video production and the incorporation of multi-media elements such as graphics, particularly computer-based graphics. The basic elements are taught primarily through hands-on experience in the production of the daily, live, news-like announcements and short video subjects, as well as through extensive study of technical vocabulary. Students will receive both academic and practical training and experience in all aspects of video production while making a variety of short videos, such as educational videos, commercials, public service announcements, and features.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

454 Photojournalism Editor

This student is the editor-in-chief of the current yearbook and oversees the completion of the book and supplement and helps to prepare the staff for next year's book. The student supervises all editors, monitors progress of each section and makes assignments. He or she also learns marketable publications skills and develops individual style.

CREDIT: 1.00 GRADE: 12 PREREQ: Advisor Approval

451 Photojournalism I

Students will be introduced to sound journalistic skills while producing the annual yearbook. They will learn principles of copywriting, design, layout, copy preparation, copy editing, advertising salesmanship, leadership roles and responsibility in carrying out work assignments and meeting deadlines. Emphasis will be placed on copywriting for this course. All students are screened based on ability, dependability, outside and extra-curricular activities. It is recommended that students take MS Publisher in grade 9 or 10 and encouraged to take Advanced Computer Applications in 10th grade. It is recommended B or better in Communications classes.

CREDIT: 1.00 GRADE: 10,11 PREREQ: Recommended as Noted Above



452 Photojournalism II

Students will learn the role of section editors, while also developing a personal sense of professionalism. They will refine copywriting, design, layout, copy preparation, copy editing, and advertising salesmanship skills while maintaining leadership roles and responsibility in carrying out work assignments and meeting deadlines. Students will learn the basics of the camera and the principles of photography. All students are screened based on ability, dependability, outside and extra-curricular activities.

CREDIT: 1.00 GRADE: 11,12 PREREQ: Photojournalism I

453 Photojournalism III

Students will utilize sound journalistic skills while producing the annual yearbook. They will help teach principles of copywriting, design, layout, copy preparation, copy editing, advertising salesmanship, leadership roles and responsibility in carrying out work assignments and meeting deadlines. Photographers will help teach fundamentals of the camera and principles of technology. All students are screened based on ability, dependability, outside and extra-curricular activities.

CREDIT: 1.00 GRADE: 12 PREREQ: Photojournalism II

690 Plant & Soil Science

This course provides instruction in the fields of plant and soil sciences. Major emphasis will be placed on plant and tree identification and growth, beginning greenhouse and horticultural skills, soils, and exploration of the changing agriculture skills and techniques.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

740 Power Technology

This is an introductory course focused on various forms of energy, power, and transportation. The energy portion will include studies of fossil fuels, electricity, nuclear, and alternative sources. The power portion will include studies of various types of propulsion such as rocket, turbine, internal combustion, and mechanical. The transportation portion will explore the various modes of transport through the design, building, and testing of models. Students will also become familiar with small engines, motorcycle maintenance, and automobile systems. This course will stress the hands-on application of the previously mentioned concepts and multiple projects will be required.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None

692 Supervised Ag Experience

This course provides specialized individual instruction to senior agriculture students meeting strict guidelines. All graduation requirements must be met plus the approval by both departmental and administrative personnel. The student will be required to complete specialized reports as part of the course work. The student must be enrolled in either Agriculture Education IV or Elective Agriculture IV.

CREDIT: 1.00 GRADE: 12 PREREQ: Recommended as Noted Above



895 Understanding Disabilities

The purpose of the course is to develop an understanding of disabilities and to create an appreciation of the challenges confronting persons with disabilities. Participants will interact directly with disabled individuals and assist them in a variety of activities. Enrollment in this course requires 12th grade standing in the Health and Family Science curriculum or teacher recommendation.

CREDIT: .50 GRADE: 11,12 PREREQ: Teacher Recommendation

649 Vet Science & Small Animals

This course will provide theory and hands-on instruction for the care and management of small animal enterprises and pets. Students will receive instruction on techniques to be used for the care, feeding, grooming, handling and the administration of health care products. Nutritional and reproductive needs, as well as their interactions of various species will be explored. Students will record skills or other records as they explore the changing agriculture technologies related to small animals and veterinary science.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

695 Welding & Plumbing

This course provides instruction in the areas of metal arc, MIG, plastic, and gas welding, plumbing, water systems and tool fitting. Students will practice various welding exercises using arc, MIG, oxy/fuel and plastic welders. Students will complete a plumbing exercise and fit/sharpen various tools of their choice. Students will record skills as they explore the changing agriculture technologies.

CREDIT: .50 GRADE: 10,11,12 PREREQ: None

756 Wood Technology

This course introduces students to several power tools including power hand tools. Students will design or choose their own project(s) (subject to instructor approval). Areas of instruction will include power equipment, cost of materials, types of common wood, construction of projects, preparing for finishes, and finishing operations.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: None



Special Education

Faculty

Mrs. Herrold

Mr. Metzger

Mrs. Troutman

Mr. Magargle

Ms. Morris

867 LS American Cultures I

This course focuses on the pre-colonization of America through the establishment of the United States as an independent nation. Students will also gain an understanding of the role of Pennsylvania in early American history. They will develop an understanding of our system of government through an examination of the U.S. Constitution and the functions of state and local governments. Students will be able to identify their rights and responsibilities as citizens within a democracy.

CREDIT: 1.00

GRADE: 9

PREREQ: Individualized Education Plan

870 LS American History Highlights

This course presents important events and themes in our nation's history to enable students to understand the political, economic, cultural, and social development of the United States. It begins with America's rapid westward expansion and continues through the significant highlights of the twentieth century.

CREDIT: 1.00

GRADE: 10

PREREQ: Individualized Education Plan

854 LS Applied Biology

This course will provide instruction in the area of human biology. Students will participate in classroom discussions, lectures, experiments, and research. The following units will be emphasized: the organization of the human body, body systems, human reproduction, diseases, preventing health problems, and general first aid.

CREDIT: 1.00

GRADE: 10

PREREQ: Individualized Education Plan

851 LS Earth Science

This course will provide instruction in the area of earth science. Students will participate in classroom discussions, lectures, experiments, and research. The units of earth science covered will be the solar system, weather, land and water, regions of the earth, shaping the earth's surface, the changing earth, materials of earth, and conservation.

CREDIT: 1.00

GRADE: 9

PREREQ: Individualized Education Plan

873 LS Global Issues

This course will provide instruction in American History beginning with the Civil War and continuing to the present day. Students will learn about forces that threatened the nation's unity, conflict, resolution, and reconstruction. They will study the emergence of industrial America to modern America. The students will learn about the two world wars, the Great Depression, and the Cold War.

CREDIT: 1.00

GRADE: 11

PREREQ: Individualized Education Plan



803 LS Integrated Communications I

This class is designed to allow students to develop a balance of reading strategies (i.e. making inferences, drawing conclusions, comparing and contrasting, evaluating) along with writing strategies (i.e. writing narrative, informational, and persuasive pieces, note taking, etc.) along with an emphasis on vocabulary and mechanics in order to develop effective communication skills strategies in order to maximize student effort on standardized tests.

CREDIT: 1.00 GRADE: 9 PREREQ: Individualized Education Plan

806 LS Integrated Communications II

This class is designed to build upon the concepts and skills introduced in LS Integrated Communications I. Students will continue to develop reading and writing strategies along with an emphasis on vocabulary and mechanics. Students will also develop specific reading strategies in order to maximize student effort on standardized tests.

CREDIT: 1.00 GRADE: 10 PREREQ: Individualized Education Plan

809 LS Integrated Communications III

This course is designed to further develop Communications skills necessary for seeking gainful employment. Skills included in this area are developing a resume, working on job applications, developing strong interpersonal skills both orally and in written form, review of business forms, and a continuation of specific reading strategies in order to maximize student effort on standardized tests.

CREDIT: 1.00 GRADE: 11 PREREQ: Individualized Education Plan

813 LS Integrated Communications III

This course will provide advanced instruction in preparing for communications areas regarding the transition from school to adult life. The students will develop an awareness of human service agencies, what services these agencies provide, and how to communicate with these agencies. The students will also sharpen their job interview skills, job application writing skills, resume writing skills, and continue development of specific reading strategies in order to maximize effort on standardized tests.

CREDIT: 1.00 GRADE: 12 PREREQ: Individualized Education Plan

835 LS Integrated Math I

The basic course in the four-part LS Integrated Mathematics sequence will focus on relating basic math concepts to daily life experiences. Specific content involves ratio and proportion, data display, proportions, percentages and probability, square area, graphs, and problem solving. In addition, students will also cover a continuation of specific math strategies in order to maximize effort on standardized tests.

CREDIT: 1.00 GRADE: 9 PREREQ: Individualized Education Plan



838 LS Integrated Math II

The second course in the four-part LS Integrated Mathematics sequence will focus on further defining basic math concepts to daily life experiences. Specific content involves problem solving and rates, area, perimeter and volume, fractions, geometry, and sequences. In addition, students will cover a continuation of specific math strategies in order to maximize effort on standardized tests.

CREDIT: 1.00

GRADE: 10

PREREQ: Individualized Education Plan

841 LS Integrated Math III

The third course in the four-part LS Integrated Mathematics sequence will further focus on defining basic math concepts to daily life experiences. Specific content involves work with cylinders, slopes, exponents, construction, inequalities, problem solving and collecting and presenting data, and multi-step word problems. In addition, students will also cover a continuation of specific math strategies in order to maximize effort on standardized tests.

CREDIT: 1.00

GRADE: 11

PREREQ: Individualized Education Plan

845 LS Integrated Math IV

The final course in the four-part LS Integrated Mathematics sequence will give a focus on defining basic math concepts to daily life experiences. Specific content involves problem solving strategies, a pre-algebra or algebra focus, and math concepts concerned in pre-employment skills. In addition, students will also cover a continuation of specific math strategies in order to maximize effort on standardized tests.

CREDIT: 1.00

GRADE: 12

PREREQ: Individualized Education Plan

819 LS Language Skills

This course will provide instruction in those skills necessary for successful participation in the high school curriculum. The students will learn library skills, computer information access, note taking, study skills, outlining, reading comprehension, test taking strategies, information interpretation, organizational skills, and writing skills.

CREDIT: 1.00

GRADE: 9

PREREQ: Individualized Education Plan

857 LS Physical Science

This course will provide instruction in the areas of physical science and technology. Students will participate in classroom discussions, lectures, experiments and research. The following units will be emphasized: matter, changes in matter, nature's energies, sound and light, magnetism and electricity, motion and forces, machines, and technology.

CREDIT: 1.00

GRADE: 11

PREREQ: Individualized Education Plan



861 LS Science IV

This course will provide instruction on topics of current issues in science. Current topics in the physical, life, and earth science areas will be discussed. Reading comprehension, vocabulary development, classroom lectures and discussions as well as experiments and research will be used to deepen the students' knowledge of important current events, achievements, and milestones in these areas.

CREDIT: 1.00 GRADE: 12 PREREQ: Individualized Education Plan

827 LS SIMMS I

This course is designed to develop a foundation for experiencing increased success in Algebra based mathematics. Algebraic content includes modeling math ideas through symbols, the identification and extension of patterns, analyzing rates of change, and developing a basis for solving equations. Minor content includes geometry principles such as relating right triangles, rates of change, and ratios. There is a high emphasis on problem solving and the development and testing of conjectures in this course.

CREDIT: 1.00 GRADE: 9 PREREQ: Individualized Education Plan

827 LS SIMMS II

LS SIMMS II is designed to help students to become proficient on the 11th grade PSSA test. The course has a high emphasis on classroom activities that provide connections to previous math courses and also to everyday experiences. The course topics will provide students with the opportunity to learn the skills and problem solving strategies necessary to function as a worker and wise consumer in the 21st century. The topics for this course fall within the five interrelated categories of Numbers and Operations, Algebra, Geometry, Measurement, and Data Analysis and Probability.

CREDIT: 1.00 GRADE: 10 PREREQ: Individualized Education Plan

877 LS Social Studies IV

Students will explore current political, economic and social events taking place on a local, state, national, and worldwide level. Students will also become familiar with the key personalities directly involved in these current events. Students will be exposed to a variety of print, audio, visual and electronic media.

CREDIT: 1.00 GRADE: 12 PREREQ: Individualized Education Plan

8930 LSS Communications Skills

Communications skills are developed and strengthened on an on-going basis in this course. Through the use of an integrated speech and language model, students develop and refine communications skills during their daily school routines. The students taking this course may communicate in a variety of ways including verbal, gesture, sign language or augmentative devices. Students who take this course will work at a level based on their own needs.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan



8900 LSS Community Skills

For this course the community will be used as an extension of the classroom. Each student will participate in a variety of activities in various locations in the community. Examples of activities and places that might be used are: mailing items at the post office, shopping for groceries, dining out at restaurants, shopping for personal items or classroom supplies, selecting a card for a relative's birthday. Each student that takes this course will work at a level based on their own needs.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

8860 LSS Domestic Skills

Students taking this course will plan and prepare snacks and meals using picture recipes and oral and written directions. The students will also be responsible for the food shopping and clean up. The students taking this course will work at a level based on their own needs.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

8920 LSS Functional Academics

This course focuses on the application of basic reading, writing, and math skills for everyday living. Examples of activities are: reading and clipping coupons, using recipes, taking messages, filling out applications, counting change, telling time. The students who take this course will work at a level based on their own needs.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

8850 LSS Health/Hygiene

This course is designed to help students learn skills necessary for maintaining basic health and hygiene. Examples of skills covered are: hair care, toiletry, nose care, tooth brushing. The students taking this course will work at a level based on their own needs.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

8890 LSS Social Skills

This course is designed to help students develop and refine appropriate social skills such as: using the telephone, table manners, common courtesies, appropriate behavior, and appropriate language. The students taking this course will work at a level based on their own needs.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

8880 LSS Vocational Skills

Through school and community based work sites the students taking this course will develop and refine work habits and job skills. Jobs and work sites are assigned based on the students' interests and skills.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan



8941 LSS Wilson Reading

The Wilson Reading program is a systematic, research based, sequential approach to teaching students decoding and encoding strategies. The purpose of the 12-step program is to enable students to become fluent and independent readers.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

7890 MDS Communications

In this course students will develop and strengthen foundations skills in the areas of reading, listening, and speaking. Students will progress along a continuum from matching objects and pictures to acquiring a reading vocabulary and demonstrating comprehension of reading selections including real life materials (signs, survival words, etc.). Students will demonstrate the ability to respond to orally presented fiction and nonfiction materials by answering questions, describing, sequencing, and predicting. Students will refine interactive communication skills in school and community settings.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

7860 MDS Community Skills

Students taking this course will use the community as the classroom. Each student will participate in a variety of activities throughout our community. Some examples of community trips are as follows: shopping for classroom supplies, groceries and personal items; a trip to a restaurant, mailing a letter at the post office, buying a gift for a relative. Students will work a level based on their own needs.

CREDIT: .50 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

7820 MDS Domestic Skills

Students will plan, prepare snacks, and prepare meals using picture recipes and oral directions. Students will be responsible for buying supplies and clean up. Students will work at a level based on their own needs.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

7810 MDS Health/Hygiene

Daily activities built into the natural routine are designed to help students learn the necessary skills to maintain basic health and hygiene. Skills that are covered within this course are: hair care, nose care, teeth brushing, and basic hygiene. Students will work at a level based on their own need.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan



7881 MDS Math

In this course students will acquire number concepts, numeration, and computation, estimation, and measurement skills. The students will move along a continuum from orienting toward concrete materials, scanning and matching to identifying numbers, counting, and problem solving in everyday life situations. Students will develop the concepts of pattern replication, money exchange, time-calendar; dry, liquid, and linear measurements, and schedules.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

7830 MDS Motor Skills

Students will develop and maintain gross and fine motor skills. Through the use of functional activities such as walking, cleaning, socializing, working, and playing, each student will utilize their large and small muscles to complete the activity. Students may also be placed on the mats, scooter boards, in various positions to work on stretching, strengthening, and relaxation purposes. Students will work at a level based on their own need.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

7870 MDS Recreation/Leisure

Students will learn the importance and the appropriate skills to participate in recreational and leisure activities. Activities may include: viewing a video, going to the movies, playing a game, bowling, giving a party, shopping, listening to music, sitting and talking to friends. Building self-esteem, fostering friendships, social skills and the development of recreational and leisure activities are all positive outcomes of this course. Students will work at a level based on their own need.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

7850 MDS Social Skills

Students will learn to develop and maintain appropriate social skills. Activities include table manners, common courtesies, appropriate behavior and appropriate language. Students will work at a level based on their own need.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan

7840 MDS Vocational Skills

Through school and community based work students will develop work habits and jobs skills. Jobs and work skills are assigned based on the students' interests. Students will work at a level based on their own need.

CREDIT: 1.00 GRADE: 9,10,11,12 PREREQ: Individualized Education Plan



799 Work Exploration/Experience

This course is designed to permit the student to explore the primary components of the world of work. Students participate in a non-paying job in the local community. After an initial amount of time, the student will experience the requirements and responsibilities of a paid work experience. Students participate in job search, job application, interviewing, and employment training. Students learn to apply skills learned in classroom situations and from previous work exploration.

CREDIT: Varies GRADE: 9,10,11,12 PREREQ: Individualized Education Plan