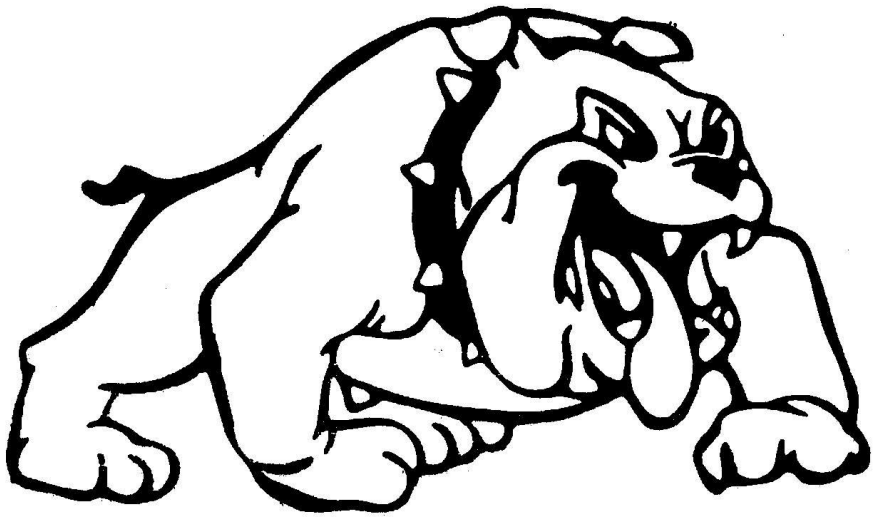
2020-2021

Student Academic Registration Handbook



Meadville Area Senior High School

CRAWFORD CENTRAL SCHOOL DISTRICT
MEADVILLE AREA SENIOR HIGH SCHOOL
ACADEMIC REGISTRATION HANDBOOK

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Meadville Area Senior High School
Scheduling Procedures
2020 - 2021

- Registration at MASH begins with teachers discussing course selections, course sequences and prerequisites with their classes to assist students in the registration process. Final teacher recommendations will stand unless a change is made as a result of parent/teacher/counselor discussions.

- Counselors will be in classes to discuss registration and distribute academic registration handbooks. Students will be instructed to discuss selections with teachers, counselors and parents.

- On a date determined, students will register for classes throughout the school day. Absentees will register the next day.

- Students will meet with their counselor on a one-to-one session in the spring to finalize schedules.

- Any changes **after the schedule has been finalized** may be considered before the current school year ends. **Counselors and Principals will only make schedule changes during the following dates:**

Counselors	June 20 - June 17, 2020
	Mid-August, 2020 – August 12, 2020
Principals	Month of July 2020 by appointment

Schedule Change Policy

Students are given ample time to study course selections and alternates. The guidance counselors are available to meet individually with each student to discuss selections that best meet the academic and career needs for each student. Student signatures at registration indicate agreement with the courses selected. Schedule change dates and policies will be strictly adhered to for the 2020-2021 school year. Students will also have an opportunity to change their course selection by scheduling an appointment in the summer to discuss other options.

Students and parents are free to subsequently discuss the schedule with guidance counselors, but there will be an effort to keep changes to a minimum. A final schedule will be given to every student on the first day of school in homeroom.

After the classes begin, students have a period of 5 class days for a semester class and 10 class days for a year long class to request to add-drop classes. These requests may or may not be granted depending on the reasons, student academic and behavior history, and seat availability. Once the drop/add period has closed students will receive a mark of WF (Withdraw and Failing) on their transcript. **Parental involvement is required. Student requests to change teachers will not be considered**. **Valid reasons for a schedule change are listed below.**

During the year a student may be withdrawn from a course for discipline reasons or at administrator discretion will receive a WF for the course.

Students will not automatically be removed from classes due to failing grades. Careful consideration will be given to the reasons for the failure. As a general rule, students will not be scheduled into courses at semesters due to failure in a course the first semester. Please see the guidance counselor for credit make-up courses and summer school options.

Students withdrawing from cyber courses and re-enrolling at MASH will have current cyber grades earned transferred to their class to reflect current progress.

Approved reasons for a change in schedule are as follow:

1.) Scheduling error
2.) Improper level or sequence as determined by the teacher, counselor, or administrator. Any change under this provision requires the notification of the student, teacher of the subject dropped, teacher of the subject added, principal, counselor and a parent.
3.) A change of career plans or college admissions requirement that necessitates the need for the addition of a course which will better prepare the student for that career or college admissions. Any change for this purpose must involve a parental conference.
4.) To accommodate a Vo-Tech schedule

Internship Experience (grade 12) (22157)
3 credits
Non-ranked

The Internship Experience is a course for students who want to gain work experience and skills for employment and credit. Students will be expected to meet all eligibility requirments including a positive attendance rate, GPA, and discipline record. Students must have transportation to and from the work program. Interested students should contact Mrs. Foulk, guidance counselor, for application and placement. Information is posted on the district website and available in the guidance office.

GRADUATION REQUIREMENTS

Students must meet all of the following requirements*:*

SPECIFIC PLANNED COURSE REQUIREMENTS

The specific planned courses required to meet the graduation requirements of the Meadville Area Senior High School are as follows:

	Credits M.A.S.H.	Credits CCCTC
English	4	4
Social Studies*	3- 4	3-4
Science*	3-4	3-4
Math*	3-4	3-4
Computer Technology Based Elective (such as Spreadsheet, Database, Computer applications)	2	1**
Humanities (such as Art,Music,Dance,Drama,Theater,World Languages,Family and Consumer Science,Tech.Ed.)	2	2
Phys. Ed/Health .5/year	2.5	2.5
Electives	4.5	4.5
	TOTAL: 26 credits	**26 credits**

* All students must earn a total of 11 combined credits in Math, Science, and Social Studies. Those credits can be earned in any 3-4 combination. It is recommended that students complete at least (1) Math credit in 9th, 10th, and 11th grades.

** CCCTC students must demonstrate computer competency associated with the academic standards of their respective CCCTC curriculum. The CCCTC is responsible for documentation of required proficiency.

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Credits Needed To Move From: **9th to 10th Grade - 5.0 Credits**
10th to 11th Grade - 11.0 Credits
11th to 12th Grade - 18.0 Credits

PROFICIENCY REQUIREMENT

Completion of secondary level coursework in **English Language Arts (Literature)**, **Algebra I and Biology** in which a student demonstrates proficiency on the associated **Keystone Exam or** related project-based assessment if it applies.

GRADUATION RANKING EFFECTIVE 2021

Beginning with the graduating Class of 2021, the district will be moving to the Latin System, which is a college-style honors system. This system will recognize all students with weighted GPA's and will no longer recognize the distinctive titles of valedictorian and salutatorian. Any student with a weighted GPA can be recognized with the following honors at the end of their senior year:

	MASH	CJSH
Summa Cum Laude	5.400-5.600	4.754-4.852
Magna Cum Laude	5.100-5.399	4.609-4.706
Cum Laude	4.700-5.099	4.366-4.526

KEYSTONE EXAMS EFFECTIVE WITH THE CLASS OF

Beginning with the Class of 2022, students will be required to show proficiency on the Pennsylvania State Keystone Exams in Algebra, Literature and Biology in order to graduate. There are alternate pathways that may be considered if students test at least twice and are not able to achieve a score of proficiency. It is highly recommended that students take these exams seriously so as to not hinder their chances of graduation.

Pathways to graduate are:

- Scoring proficient or advanced on each Keystone Exam – Algebra I, Literature, and Biology.
- Earning a satisfactory composite score on the Algebra I, Literature, and Biology Keystone Exams.
- Earning a passing grade on the courses associated with each Keystone Exam, and satisfactorily complete one of the following: an alternative assessment (SAT, PSAT, ACT, ASVAB, Gold Level ACT WorkKeys), advanced coursework (AP, IB, concurrent enrollment courses), pre-apprenticeship or acceptance in a 4-year nonprofit Institution of higher education for college-level coursework.
- Earning a passing grade on the courses associated with each Keyston Exam, and pass NOCTI or NIMS assessment in an approved Career and Technical Education concentration.
- Earning a passing grade on the courses associated with each Keyston Exam, and demonstrate readiness for postsecondary engagement through three pieces of evidence from the student's career portfolio aligned to student goals and career plan.

MEADVILLE AREA SENIOR HIGH SCHOOL
SCHOOL PROFILE
2019 - 2020
930 North Street Extension
Meadville, PA 16335-2199
School Code 392535
Phone: (814) 336-1121 / Fax: (814) 333-9199

Principal.....	John C. Higgins
Assistant Principa.....	Stacey L. Walsh
Dean of Students	Jacob J. Scott
Secondary Testing Coordinator.....	Barry L. Anderson

PROFILE

School Facts:

Meadville Area Senior High School is a comprehensive public high school located in Northwest Pennsylvania accredited by Middle States Association of Colleges and Secondary Schools. Meadville is a small city in a rural setting, located 40 miles south of Erie and 90 miles north of Pittsburgh; Meadville is also the home of Allegheny College.

Programs:

College Preparatory, Academic and Career-Technical programs offered

Groupings:

AP Advanced Placement Courses in English Literature, US History, European History, Biology, Statistics, Physics I & II, Chemistry, Calculus, Computer Science, French, Spanish and German.

Accelerated Programs in English, History, Mathematics, Science, French, Spanish, and German

Academic
Standard

ENROLLMENT

Grade 12	Class of 2020	223	Michael J. Swick, Counselor
Grade 11	Class of 2021	207	Gina M. Foulk, Counselor
Grade 10	Class of 2022	199	Barry L. Anderson, Counselor
Grade 9	Class of 2023	192	Barry L. Anderson A-L / Gina M. Foulk M-Z
Total Enrollment		821	
Professional Staff		70	

SUMMARY DATA

Class	School Enrollment	Graduates	% 4 yr Colleges	% Other Post HS
18-19	826	206	67	16
17-18	922	224	74	15
16-17	890	198	70	18

AVERAGE SAT SCORES

Class	ERW (Verbal)	Math	% Seniors Tested
18-19	543	525	51
17-18	523	500	62
16-17	542	522	55

AVERAGE ACT SCORES

Class	English	Math	Reading	Science	Composite	% Seniors Tested
18-19	21	22	22	23	22	17
17-18	21	21	23	22	22	22
16-17	23	22	24	23	23	1

ACADEMIC RANKING

A=6.00 B=5.00	C=3.00	D=1.50 F=0
01407 AP English Lit & Comp	12307 AP Computer Science Principal	03315 Advanced Chemistry II
04205 19th Century US History - Accel.	12305 AP Computer Science A	02214 AP Statistics
04303 AP United States History	03306 Honors Biology	06105 French IV
04304 AP European History	03309 AP Biology	06106 French V
02302 Geometry - Accel.	03307 Honors Chemistry	06205 Spanish IV
02301 Algebra II - Accel.	03310 AP Chemistry	06206 Spanish V
02303 Elem Functions	03308 AP Physics I	06304 German IV
02304 AP Calculus AB	03311 AP Physics II	06305 German V
	03313 Ind. Study Calculus Based Physics	

A=5.00 B=3.75	C=2.50	D=1.25 F=0
01401 Accelerated English 9	02305 Algebra II - Acad.	06101 French I
01404 Accelerated English 10	02208 Intro Trig/Alg II	06102 French II
01405 Accelerated English 11	02206 Pre-Calculus - Acad.	06103 French III
01406 Accelerated English 12	12304 Introduction to JAVA	02210 Academic Statistics
04108 Civics and Government - Accel.	03211 Geology	06201 Spanish I
04203 19th Century US History - Acad.	03210 Astronomy	06202 Spanish II
04308 20th Century World History - Acad.	03202 Academic Biology	06203 Spanish III
04401 World Governments and Economics	03207 Senior Biology	06301 German I
02204 Geometry - Acad.	03205 Academic Chemistry	06302 German II
02207 Algebra I - Acad.	03206 Academic Physics	06303 German III

A=4.00 B=3.00	C 2.00	D=1.00 F=0
01205 English 9	04807 Social Sciences	01502 General English 10
01402 Academic English 9	02401 Consumer Math	02502 General Math 10
01206 English 10	02105 Practical Geometry	04502 General Social Studies 10
01302 Academic English 10	02102 Practical Algebra A	03502 General Science 10
01207 English 11	02103 Practical Algebra B	01503 General English 11
01303 Academic English 11	02106 Select Topics	02503 General Math 11
01208 English 12	03103 Conceptual Chemistry	04503 General Social Studies 11
01304 Academic English 12	03114 Conceptual Physical Science	03503 General Science 11
04106 Civics and Govt - General	01501 General English 9	01504 General English 12
04107 Civics and Govt - Acad.	02501 General Math 9	02504 General Math 12
04202 19th Century US History 10	04501 General Social Studies 9	04504 General Social Studies 12
	03501 General Science 9	03504 General Science 12

Courses that are more skill related than academic are not included in the ranking process

01601 Mythology	05223 Concert Band	13229 Intro to Robotics Engineering
01813 Introduction to Theatre	05203 Music Theory	13311 Robotics Engineering I
01815 Advanced Theatre	05218 Class Guitar	13313 Robotics Engineering II
01810 Creative Writing	05219 Class Guitar	13314 Robotics Engineering III
01812 Public Speaking	05105 Art I	13210 Drafting/Solid Works Intro
01805 Introduction to Journalism	05107 Art II	13212 Solid Works
01807 Journalism I	05109 Art III	13219 Advanced Solid Works
01808 Journalism II	05119 Ceramics I	13120 Visual Communications
01809 Journalism III	05121 Ceramics II	13111 Digital Photography
22101 Academic Challenge	05123 Ceramics III	13114 Advanced Digital Photography
11101 Media Arts	05115 Painting I	22204 Child Development
11102 Digital Communications	05117 Painting II	22206 Parenting
11104 Advanced Digital Communications	05125 Commercial Art	22208 Foods I
11110 Aerial Videographing	05130 Independent Study	22211 Foods II
12101 Comp Applications & Career Readiness	05111 Drawing I	22214 Textiles & Apparel I
12125 Introduction to Marketing	05113 Drawing II	22217 Textiles & Apparel II
12119 Personal Financial Literacy	13406 Basic Construction	22221 Money & Relationships
12121 Internet and Multimedia	13401 Woodworking	08130 Physical Education
12123 Computer Publications	13404 Advanced Woodworking	08131 - Health & Wellness
12102 Reality Check-21st Century Success!	13305 Machining	08132 Personal Wellness
12303 Independent Study in Computer Science	13308 Advanced Machining	08133- Lifetime Wellness
05303 Concert Choir	13301 Intro to Welding	08134 Physical Education
05306 Concert Choir	13304 Welding Design & Fabrication	08204 Health Education
05320 Treble Choir	03109 Interactive Technologies I	22300 G.A.T.E.
05329 Treble Choir	03110 Interactive Technologies II	22301 G.A.T.E.
05205 Orchestra	12204 Accounting I	22302 G.A.T.E
05208 Orchestra	12205 Accounting II	22401 Innovation Class
05220 Concert Band	12117 Business & Personal Law	22157 Internship CO-OP
13201-13202-13203 Precision Mach	17002-17003 Carpentry	22501 Social Skills
10001-10003 Comp/Info Science	11153-11154 Commercial Art and Graphics	11111 Tech Team I
21001-21003 Draft/Design Tech/Cadd	19100-19101 Cosmotology	11112 Tech Team II
17105-17106-17107 Electronic Tech	20106-20107 Diesel Technology	18051-18052 Landscape & Turfgrass Mgmt
20115-20116 Auto Collision Tech	22153 Diversified Occupations	17101-17102 Electrical Occupations
20103-20104 Auto Technology	16052-16053 Culinary Arts & Restaurant Mgmt	14001-14002 Health Occupations
22151- CO-OP Program	19050-19051 Early Childhood Education	13206-13207 Welding

SERVICES

Guidance Services

The mission of the Crawford Central Secondary School Counseling program is to provide a comprehensive, developmental counseling program addressing the academic, career, and personal/social development of all students. The professional school counselor collaborates and consults with the staff, parents, and the community to promote and advocate success of the students.

Students and/or parents wishing to visit a counselor may contact the secretary in the guidance office for an appointment.

School Health Services

The school health program is set up to take care of accidents and illness that occur during school hours. The program is not responsible for definitive treatment.

When a student finds it necessary to see the nurse, she/he must first secure a pass from the teacher before reporting to the medical room. Report DIRECTLY to the nurse's office. Failure to do so will be considered a class cut.

If the school nurse determines that a student is ill and should be sent home, a parent, guardian or designated emergency person must be contacted so that parental permission can be obtained to release the student from school. It is the responsibility of the parents to provide transportation home. A student that has driven to school and becomes ill may drive home if the school nurse feels that he or she is well enough to drive and if the parent approves.

No student is permitted to be excused from class to drive a sick student home except by special permission from a principal and permission from all involved parents.

State law prohibits school personnel from giving medication or doing treatments to students in school unless ordered in writing by a physician. This requirement also pertains to inhalers used to treat asthma. Students who use an inhaler in school are required to report to the nurse's office with each use. Students must register all medications in the health room with the nurse. Written permission from the parent for the medication is required.

Vision tests, height, and weight measurements are done annually on all students. All pupils in grade 11 and others who have a hearing problem receive an audiometric test.

Physical examinations are required for juniors and for students moving from other school districts into Crawford Central School District without health records. These examinations may be done by a private physician or by the school physician. Proper forms are provided by the school nurse.

Anyone having a special health problem, i.e., diabetes, epilepsy, or a heart condition is urged to discuss this with the nurse so that he/she will receive appropriate medical attention during the school day.

Media Center

The Meadville Media Center provides access to and instruction in the use of print and non-print materials including information technology. Our goal is to provide an atmosphere and facility that encourages our students to become effective users of ideas and information and to afford students opportunities to be critical thinkers, life-long learners, and discriminating decision makers.

The Media Center opens at 8:00 a.m. and is available after school until 4:00 p.m. The Media Center has an atmosphere that provides an opportunity for collaboration and relaxation in an atmosphere conducive to academics. Students may sign out and return books at any time and may, with appropriate behavior, spend their study hall time in the Media Center.

The Media Center collection is curriculum-based to support classwork and promotes reading and literature appreciation by providing exciting titles for recreational reading. There are approximately 20,000 volumes in the Media Center.

Students will be given a student ID card each year when pictures are taken. All seniors must have their pictures taken to receive an ID card**. Students are expected to use their ID cards from the previous year until new ones are issued for the current year.**

All students may spend class time in the Media Center receiving information literacy and technology skills. In addition, students and teachers may make an appointment with the media specialists for individualized instruction on any aspect of Media Center use.

Honor Roll

A High Honors Award will be awarded if the student achieves a 95% or higher combined average of classes that meet (5) days per week.

An Honor Roll Award will be awarded if the student achieves an 83-94% combined average of classes that meet (5) days per week.

Students who are awarded either the High Honors or Honor Roll Award must achieve at least a 70% in every class.

High Honors and Honor Roll will be calculated using a non-weighted grading scale.

Courses that will be considered for High Honors and Honor Roll must meet five days per week.

ENGLISH SEQUENCE CHART

GRADE				
9 to 10	***Accelerated English 9*** (A/ B+ students) or ***Academic English 9*** (A+ students)	***Accelerated English 9*** (B/C/D students) or ***Academic English 9*** (A/B/C+ students) or ***English 9*** (A students)	***Academic English 9*** (C/D students) or ***English 9*** (B/C/D students)	
	Accelerated English 10	***Academic English 10***	***English 10***	
10 to 11	***Accelerated English 10*** (A/ B+ students) or ***Academic English 10*** (A+ students)	***Accelerated English 10*** (B/C/D students) or ***Academic English 10*** (A/B/C+ students) or ***English 10*** (A students)	***Academic English 10*** (C/D students) or ***English 10*** (B/C/D students)	
	Accelerated English 11	***Academic English 11***	***English 11***	
11 to 12	***Accelerated English 11*** (A/ B+ students)	***Accelerated English 11*** (A/ B students) or ***Academic English 11*** (A+ students)	***Accelerated English 11*** (C/D students) or ***Academic English 11*** (A/B/C+ students) or ***English 11*** (A students)	***Academic English 11*** (C/D students) or ***English 11*** (B/C/D students)
	AP English Literature & Composition	***Accelerated English 12***	***Academic English 12***	***English 12***

01205 **ENGLISH 9** 1 credit A = 4

The course is designed for the student who plans to pursue a career, enlist in the military, or attend postsecondary education immediately after graduation. Emphasis is on vocabulary, grammar, composition, literature, and research. In grammar, students will be required to work with parts of speech and modifiers. In composition, the students will be required to understand the structure of and write narrative, informative, and compare and contrast paragraphs. In literature, the students will be required to know, comprehend, apply, interpret and analyze fiction, nonfiction, poetry, and drama. **A research project is required to pass the course.**

Time will also be spent planning and organizing the students' educational and occupational futures.

MATERIALS:
Romeo and Juliet (Next Text)
The Contender
The Cay
Write Source 9
Vocabulary for Achievement Introductory Course
The Outsiders
Chinese Cinderella
No Promises in the Wind
Literature: The Reader's Choice
The Sun is Also a Star

01402 **ACADEMIC ENGLISH 9** 1 credit A = 4

The course is designed for the student who plans to pursue a college education. Emphasis is on grammar, composition, literature, and research. In grammar, students will be required to work with verbs, nouns, and modifiers. In composition, the students will be required to understand the structure of and write narrative, descriptive, persuasive, and compare and contrast paragraphs. In literature, the students will be required to know, comprehend, apply, interpret and analyze fiction, nonfiction, poetry, and drama. **A research project/ paper is required to pass the course. *NCAA approved course**

Time will also be spent planning and organizing the students' educational and occupational futures.

MATERIALS:
Romeo and Juliet
No Promises in the Wind
The Outsiders
Write Source 9
Vocabulary for Achievement Introductory Course
Literature: The Reader's Choice
The Contender
The Sun is Also a Star

01401 **ACCELERATED ENGLISH 9** 1 credit A = 5

The course is designed for the student who plans to pursue a college education. The student should be reading at or above grade level and be writing free of mechanical errors and in complete sentences. Emphasis is on composition, grammar, literature, and research. In grammar the student will work with various functions of nouns, verbs, adjectives, adverbs, prepositional phrases, clauses, and verbals. In composition the student will be required to write multi-paragraph narrative, descriptive, persuasive, and compare and contrast essays. In literature, the student will be required to know, comprehend, apply, interpret and analyze fiction, nonfiction, poetry, and drama. **A summer assignment is a requirement for the course. A research project/ paper is required to pass the course. *NCAA approved course**

Time will also be spent planning and organizing the students' educational and occupational futures.

MATERIALS:
Romeo and Juliet
Great Expectations
Red Badge of Courage
The Fault in Our Stars
The Outsiders
The Sun is Also a Star
Write Source 9
Vocabulary for Achievement First Course
Literature: The Reader's Choice

01206 **ENGLISH 10** 1 credit A = 4

The course is designed for the student who plans to pursue a career, enlist in the military, or attend postsecondary education immediately after graduation. Emphasis is on grammar, composition, literature, vocabulary, oral presentation and research. In grammar, the students will be required to work with conjunctions (coordinating, subordinating and correlative), verbs (parallel tense, active and passive voice), pronouns (usage, agreement and case) and misplaced modifiers. In composition, the students will be required to understand the difference between formal and informal writing; and write narrative, informational, persuasive, and compare and contrast essays. In literature, the students will be required to know, comprehend, interpret, analyze and evaluate fiction, nonfiction, poetry and drama. **A research project/ paper is required to pass the course.**

MATERIALS:
Julius Caesar Next Text
The Chocolate War
The Miracle Worker
Gulliver's Travels Next Text
Runner
The Pearl
Write Source10
Vocabulary for Achievement First Course
High Marks
Sixteen (Short Stories)
The Art of Work
Decisions, Decisions
Glencoe World Literature Anthology
Real Essays

01302 **ACADEMIC ENGLISH 10** 1 credit A = 4

This year long course is specifically designed for the student who plans to pursue a four-year college education. Emphasis is on grammar, composition, literature, vocabulary, oral presentation and research. In grammar, the students will be required to work with conjunctions (coordinating, subordinating and correlative), verbs (parallel tense, active and passive voice), pronouns (usage, agreement and case) and misplaced modifiers. In composition, the students will be required to understand the difference between formal and informal writing; and write narrative, informational, persuasive, and compare and contrast essays. In literature, the students will be required to know, comprehend, interpret, analyze and evaluate fiction, nonfiction, poetry and drama. **A research project/ paper is required to pass the course. *NCAA approved course**

MATERIALS:
Julius Caesar
The Pearl
The Lord of the Flies
Animal Farm and Related Readings
Roll of Thunder, Hear My Cry
The Pigman
Plague Year
Write Source 10
Vocabulary for Achievement First Course
Steps in Composition
World Literature Anthology
Real Essays
Writing Clear Essays

01404 **ACCELERATED ENGLISH 10** 1 credit A = 5

This year long course is specifically designed for the student who intends to enroll in Advanced Placement courses and plans to pursue a college education. Emphasis is on grammar, composition, literature, vocabulary, oral presentation and research. In addition, this course examines the English language and how it affects our thoughts and actions. In grammar, the students will be required to work with conjunctions (coordinating, subordinating and correlative), verbs (parallel tense, active and passive voice), pronouns (usage, agreement and case) and misplaced modifiers. In composition, the students will be required to understand the difference between formal and informal writing; and write narrative, informational, persuasive, definition, descriptive, literary criticism, process, cause and effect, and compare and contrast essays. In literature, the students will be required to know, comprehend, interpret, analyze, synthesize and evaluate fiction, nonfiction, poetry and drama. **A summer reading is a requirement for the course. A research project/ paper is required to pass the course. *NCAA approved course**

MATERIALS:
The Merchant of Venice
Anthem
Nineteen Eighty-Four
A Brave New World
Write Source 10
Vocabulary for Achievement Second Course
Real Essays
Real Writing
Language in Thought and Action
Unbroken

01207 **ENGLISH 11** 1 credit A = 4

The course is designed for the student who plans to pursue a career, enlist in the military, or attend postsecondary education immediately after graduation. Emphasis is on grammar, composition, American literature, vocabulary, oral presentation and research. During the course, the student is asked to compare themes in art and music to literary themes in order to develop a keener understanding of his/ her culture and other cultures. In grammar, the students will recall grammar from previous years and be required to work with ambiguous pronouns and faulty comparisons. In composition, the students will be required to understand the difference between formal and informal writing, and write narrative, informational, persuasive, and compare and contrast essays. In literature, the students will be required to know, comprehend, interpret, analyze, synthesize and evaluate fiction, nonfiction, poetry and drama. **A research project/ paper is required to pass the course.**

MATERIALS:

The Taming of the Shrew
A Midsummer's Night Dream
It's a Matter of Trust
Winning
Seventeen Against the Dealer
The Scarlet Letter
Write Source 11
Vocabulary for Achievement Second Course
Wide Open Spaces
To Be a Hero
READ Magazine
Glencoe American Literature
Huckleberry Finn
Of Mice and Men

01303 **ACADEMIC ENGLISH 11** 1 credit A = 4

This year long course is specifically designed for the student who plans to pursue a college education. Emphasis is on grammar, composition, American literature, vocabulary, oral presentation and research. During the course, the student is asked to compare themes in art and music to literary themes in order to develop a keener understanding of his/ her culture and other cultures. In grammar, the students will recall grammar from previous years and be required to work with ambiguous pronouns and faulty comparisons. In composition, the students will be required to understand the difference between formal and informal writing, and write narrative, informational, persuasive, and compare and contrast essays. In literature, the students will be required to know, comprehend, interpret, analyze, synthesize and evaluate fiction, nonfiction, poetry and drama. **A research project/ paper is required to pass the course. *NCAA approved course**

MATERIALS:

The Taming of the Shrew
A Separate Peace
Of Mice and Men
To Kill a Mockingbird
The Adventures of Huckleberry Finn
The Miracle Worker
A Raisin in the Sun
Death of a Salesman
Write Source (orange level)
Vocabulary for Achievement Third Course
Literature: Timeless Voices and Timeless Themes
Writing Clear Essays
Models for Clear Writing

01405 **ACCELERATED ENGLISH 11** 1 credit A = 5

This year long course is specifically designed for the student who intends to enroll in Advanced Placement courses and plans to pursue a college education. Emphasis is on grammar, composition, American literature, vocabulary, oral presentation and research. The course is designed to emphasize the connection between American literature across the ages and the students' modern day lives and world views, as well as current events. In grammar, the students will recall grammar from previous years and be required to work with ambiguous pronouns and faulty comparisons. In composition, the students will be required to write narrative, informational, persuasive, literary analysis, cause and effect, and compare and contrast compositions. In literature, the students will be required to know, comprehend, interpret, analyze, synthesize and evaluate fiction, nonfiction, poetry and drama within a historical context through writing and critical discussion. **A summer reading is a requirement for the course. A research project/ paper is required to pass the course. *NCAA approved course**

MATERIALS MAY INCLUDE:

The Taming of the Shrew
The Great Gatsby
The Scarlet Letter
The Magnificent Ambersons
Ethan Frome
The Adventures of Huckleberry Finn
The Grapes of Wrath
To Kill a Mockingbird
All My Sons
A Streetcar Named Desire
The Crucible
Unbroken
Write Source (orange level)
Vocabulary for Achievement Fourth Course
The American Experience: Quest for Identity
Twelfth Night

01208 **ENGLISH 12** 1 credit A = 4

The course is designed for the student who plans to pursue a career, enlist in the military, or attend post-secondary education immediately after graduation. Emphasis is on grammar, composition, world literature, vocabulary, oral presentation and research. In grammar, the students will recall grammar from previous years. In composition, the students will be required to understand the difference between formal and informal writing; and write narrative, informational, literary criticism and compare and contrast essays. In literature, the students will be required to know, comprehend, interpret, analyze, synthesize, critique and evaluate fiction, nonfiction, poetry and drama through writing and critical discussion. **A research project/ paper is required to pass the course.**

MATERIALS:
Hamlet
Night
Mary Wolf
A Tale of Two Cities Next Text
Tunes for Bears to Dance To
British Literature: Traditions and Change
Write Source 12
Vocabulary for Achievement Fourth Course
Journeys
Nova – Short Story Anthology World Folktales
Calamities
The Art of Life

01304 **ACADEMIC ENGLISH 12** 1 credit A = 4

This year long course is specifically designed for the student who plans to pursue a college education. Emphasis is on grammar, composition, British literature, vocabulary, oral presentation and research. During the course, the student is asked to compare themes in art and music to literary themes in order to develop a keener understanding of his/ her culture and other cultures. In grammar, the students will recall grammar from previous years and be required to work with ambiguous pronouns and faulty comparisons. In composition, the students will be required to understand the difference between formal and informal writing, and write narrative, informational, persuasive, and compare and contrast essays. In literature, the students will be required to know, comprehend, interpret, analyze, synthesize and evaluate fiction, nonfiction, poetry and drama. **A research project/ paper is required to pass the course.**

***NCAA approved course**

MATERIALS:
Hamlet
Macbeth
Night
Frankenstein
The Bean Trees
The Good Earth
British Literature: Traditions and Change
Write Source 12
Vocabulary for Achievement Fifth Course
Impact
Adventures in English Literature
Modern World Literature

01406 **ACCELERATED ENGLISH 12** 1 credit A = 5

This year long course is specifically designed for the student who plans to pursue a college education. Emphasis is on grammar, composition, world literature, vocabulary, oral presentation and research. The literature read will examine the tension between personal values and social responsibilities. In grammar, the students will recall grammar from previous years. In composition, the students will be required to understand the difference between formal and informal writing; and write narrative, informational, persuasive, cause and effect, literary criticism and compare and contrast essays. In literature, the students will be required to know, comprehend, interpret, analyze, synthesize, critique and evaluate fiction, nonfiction, poetry and drama through writing and critical discussion. **A summer reading is a requirement for the course. A research project/ paper is required to pass the course.**

***NCAA approved course**

MATERIALS:

Macbeth
Hamlet
Antigone
Cyrano de Bergerac
The Importance of Being Ernest
A Tale of Two Cities
All Quiet on the Western Front
The Joy Luck Club
Cry, the Beloved Country
Far From the Madding Crowd
Frankenstein
Watership Down
British Literature: Traditions and Change
Write Source 12
Vocabulary for Achievement Sixth Course
Modern World Literature
Adventures in English Literature

01407 **AP ENGLISH LITERATURE & COMPOSITION** (Grade 12) 1 credit A=6

This college-level full year course is concerned primarily with understanding and analyzing literature. Referring to the literature studied, students develop both oral and written compositions throughout the year. **Summer reading and analysis assignments and research-based papers are a requirement for this course.**

NCAA approved course

OBJECTIVES: The AP student will:

1. develop criteria for evaluating fiction and non-fiction
2. support opinions by referring to specifics within fiction and non-fiction passages
3. use Advanced Placement writing rubric to evaluate essays and research papers.

OBJECTIVES: The AP student will:

Literature:

1. analyze literature: its use of literal and figurative language; its characters and themes
2. describe the structure of a literary work
3. explain the relationship between a work's structure and its meaning
4. compare literature from different periods for points of view, development of character, plot, and style of writing
5. explain how the differences in literature reflect the differences in societies

Analysis:

1. explain the role of effective language in creating tone in prose and poetry
2. build generalizations from an analysis of details
3. analyze and explain the relative importance of elements within particular literary works

Writing:

1. demonstrate a sensitivity to nuances in the use of language: connotation, paradox, irony, shifts in syntax, tone, point of view, etc.
2. independently produce research papers which also contain the student's evaluation of critical information

Speaking:

1. explain his/her opinion by referring to specific elements of a literary work
2. organize and participate in group presentations which define and expand a specific purpose
3. orally present critical analysis of literature individually and in small groups

MATERIALS:

The Mayor of Casterbridge
Wuthering Heights
Lord Jim/Heart of Darkness
Crime and Punishment
Waiting for Godot
Rosencrantz and Guildenstern Are Dead
Hamlet
Poetry: An Introduction
MacBeth
Multiple Choice Questions in Preparation for the AP English Literature and Compostition Examination

01407 **AP ENGLISH LITERATURE & COMPOSITION CON'T:**

Reading may vary according to staged performances and related programs.

PREREQUISITES FOR AP ENGLISH LITERATURE & COMPOSITION:

1. Must pass Accelerated English 10 with a grade of 87% or better
2. Must pass Accelerated English 11 with a grade of 87% or better:
3. Must have achieved proficient or advanced on Keystone Literature exam by the end of junior year.

Any exceptions to the prerequisites will be reviewed by a course instructor and may require additional teacher recommendations. Any request for such a review should be made before May 1st. The student making the request should explain, in writing, why he/she lacks these prerequisites and why he/she wishes to participate in AP English Literature & Composition.

ELECTIVES

01601 **MYTHOLOGY** (Grades 10-12) 1/2 credit non-ranked

ELECTIVE CREDIT ONLY-NOT AN ENGLISH CREDIT

Mythology uses works which rely on mythological, Biblical, historical, and literary allusions for their developments and purposes. The course will be organized in units which focus on patterns in mythological literature. Library and comunication skills (written and oral) will be required to complete the course.

***NCAA approved course**

OBJECTIVES: the students will:

1. analyze the roles of allusions in communication
2. identify and explain various mythological, Biblical, historical, and literary allusions
3. identify and analyze patterns and archetypes used within an artist's work
4. analyze an artistic work and explain how allusions, patterns, and archetypes support an author's purpose
5. identify and analyze techniques used within a literary work
6. complete unified and coherent fiction and nonfiction compositions in response to class material
7. use Keystone Composition rubric to evaluate paragraphs and essays

MATERIALS:

Introduction to Mythology
Myths and Their Meaning
Mythology, Edith Hamilton
When the Legends Die
The Old Man and the Sea
The Odyssey

Student journals
Selected readings relevant to mythology

01813 INTRODUCTION TO THEATRE (Grades 9-12) 1/2 credit non-ranked

(only offered in school years ending in an odd numbered year)

ELECTIVE CREDIT ONLY - NOT AN ENGLISH CREDIT

This elective course is designed to deepen the understanding of oneself and others, to build self-confidence and strengthen self-image, to improve the ability to relate to others, to exercise the imagination, and to encourage creativity. Cognitive goals are to ensure that each student will have a basic knowledge of what drama is, the history of drama, how plays are produced, technical requirements in theatre, and basic acting theory. This knowledge is put to use in performance activities.

The classroom atmosphere is relaxed but the course must be carefully structured to bring the group to the point where members feel comfortable, enthusiastic, and supportive to others in the working group stage. Goals are discussed at the beginning of the course and are identified for each activity. Attendance is integral to success.

The course culminates in a student written, directed, produced, and performed one-act play. The final production allows students to utilize the experience and knowledge gained throughout the course.

OBJECTIVES: The students will:

1. become aware of the history of drama, the purposes of drama, the structure of plays, the various forms of drama, and the types of theater
2. analyze plot, structure, setting, and character with emphasis on how this relates to play production
3. learn drama vocabulary and use it throughout the course
4. practice relaxation techniques necessary for acting
5. work in a group to break down mental, physical, and emotional barriers within the group
6. participate with and in front of a group or audience to develop self-confidence and improve self-image
7. learn to improve vocal skills and voice projection
8. develop their creative abilities and imagination by participating in activities designed to utilize the skills and knowledge learned throughout the course.

MATERIALS: Selected scenes and monologues Basic Drama Projects
Exploring Theatre
Theatre: Art in Action

01815 **ADVANCED THEATRE** (Grades 11-12) 1/2 credit non-ranked
(only offered in school years ending in an even numbered year)

ELECTIVE CREDIT ONLY - NOT AN ENGLISH CREDIT

This course is an expanded study of the elements of theatre which include various playwrights, acting, staging, design and construction, direction and stage management. Students will create and maintain a portfolio of theatre information and research. The students will read and analyze different types of plays and prepare and perform scenes, as well as a final one-act production.

OBJECTIVES: The students will:

1.recognize and appreciate drama and theatre as an art form
2. identify the practical requirements of a theatre production
3. recognize the structure and elements of a play rehearsal
4. practice useful performance/acting activities
5. practice the various technical, production, and performance aspects of theatre

MATERIALS: various one-act plays *Basic Drama Projects*
Scenes for Young Actors *Theatre: Art in Action*
Scenes and Monologues from the New American Theatre *Book of Scenes for Aspiring Actors*
Monologues for Aspiring Actors

01810 **CREATIVE WRITING** (Grades 9-10) 1/2 credit non-ranked

ELECTIVE CREDIT ONLY - NOT AN ENGLISH CREDIT

Creative Writing is a course elective designed for students who possess a genuine interest in developing their creative talents in writing. Although the focus is obviously on communicating through writing, the development of the students' thought processes and imagination is also inherent. The personal beliefs and opinions expressed allow the students to better understand themselves and others. The course further fosters a sense of personal accomplishment and confidence, and in addition, an appreciation of this medium of self-expression.

Several modes of writing are exposed. Among those most stressed are poetry (including odes and limericks), short stories and flash fiction. The students will compose various creative presentations of work. Optional writing activities, including plays and mythology, are possibilities for students with interest in such writing. A final project allows students to pursue the mode of writing with which they most desire to work.

Because of a less formal classroom atmosphere, the students are afforded ample time to work on an individual basis. It is imperative the students possess the necessary discipline to carry an idea from its initial stage completely to fruition. In general this course endeavors to formulate a climate conducive to the development and expression of ideas in writing.

****NCAA approved course***

OBJECTIVES: The students will:

1. develop their creative ability
2. develop an awareness of and demonstrate the use of the elements and devices inherent in various forms of creative writing
3. develop the ability to express themselves
4. develop critical thinking skills
5. develop their own writing style
6. develop an awareness of the need for and the value of revision
7. develop an appreciation of the various modes of creative writing
8. develop the ability to work independently

MATERIALS: Teacher generated material
Student-written samples

01812 **PUBLIC SPEAKING** (Grades 11-12) 1/2 credit non-ranked

ELECTIVE CREDIT ONLY - NOT AN ENGLISH CREDIT

Public speaking is designed for students who would like to acquire self-confidence and poise while developing formal oral communication. Videorecording will be used as a means of self-evaluation.

****NCAA approved course***

OBJECTIVES: The students will:

1. think and logically organize speeches of varied subject matter
2. present speeches in different types of speaking-listening-evaluating situations
3. make speaking experiences practical
4. outline and use an outline as a framework for a speech
5. practice speaking techniques
6. interpret materials
7. evaluate speech presentations

MATERIALS:

speeches to read for outline and criticism
sources to consult for written speeches
subjects for speeches
topics for discussions
sources of illustrative stories, anecdotes, monologues, and poetry
one line resources

01805 INTRODUCTION TO JOURNALISM (Grades 9-10) 1/2 credit non-ranked

ELECTIVE CREDIT ONLY - NOT AN ENGLISH CREDIT

Journalism should focus on the "collecting, writing, editing, interpretation, and evaluation of news and information." (English Journal, November 1986) This course is designed to meet those goals. In addition, students are encouraged to become knowledgeable in the history and relevance of our first amendment freedoms and to understand the impact of the media on society today. With the added incentive of computer technology in the classroom, students are able to gather information, write and edit their stories, and print the finished product with software especially designed for school publications. (English Journal, January 1986) Students learn photography basics and create a photo essay.With a combination of theory and practice, students learn about the limitations and responsibilities, as well as the personal satisfaction, that are all a part of the field of Journalism. This course prepares students to become part of a scholastic newspaper staff and is a prerequisite to Journalism I.

****NCAA approved course***

OBJECTIVES: The students will:

1. discuss limitations and responsibilities of the first amendment, freedom of the press
2. recognize and write news, features, opinion articles, and sports
3. conduct interviews
4. become familiar with the daily paper content and format
5. become aware of the importance of the newspaper in everyday life
6. recognize the role of advertising in the marketplace
7. learn techniques of layout and design for school paper
8. photograph using basic photography techniques

MATERIALS:

Meadville Tribune/ Erie Daily Times
Journalism Today!
Dell Computer, Microsoft Word, Microsoft Publisher
Digital Camera

01807 **JOURNALISM I** (Grades 10-12) 1 credit non-ranked

ELECTIVE CREDIT ONLY - NOT AN ENGLISH CREDIT
(Students will receive a maximum total of three credits for Journalism courses)

The chief emphasis of this course will be to produce The *BARK* newspaper using the fundamentals of journalistic writing. Students will conduct interviews and write news, sports, features, opinion articles, and take pictures. In addition, the students will become familiar with the production stages from beginning to end, including the use of Microsoft Word, Microsoft Publisher, and the Internet. Along with producing the newspaper, the students will also promote and sell advertising. **Prerequisite: must have had a "B" or better in Acad. English or a "B" or better in Accel. English in the 9th grade. Intro to Journalism or teacher recommendation is required.**

OBJECTIVES: The students will:

1. read newspapers more intelligently
2. gain insight in the correct methods of communication
3. utilize basic knowledge of all aspects of journalism as a means of channeling and developing particular interests and talents
4. appreciate the rights and responsibilities guaranteed by the First Amendment
5. use the library skills curriculum for information management
6. produce the high school newspaper

MATERIALS:

Press Time - *Julian Adams, Kenneth Strahon*
Scholastic Journalism - *Earl English, Clarence Hach*
Dell Computer; Microsoft Word, Microsoft Publisher
Meadville Tribune
Erie Daily Times
Journalism Today!

01808 **JOURNALISM II** (Grades 11-12) 1 credit non-ranked

Course description same as Journalism I except for prerequisite. **Prerequisite: must have completed Journalism I with a "B" or better.**

01809 **JOURNALISM III** (Grade 12) 1 credit non-ranked

Course description same as Journalism I & II except for prerequisite. **Prerequisite: must have completed Journalism I and II with a "B" or better.**

COMMUNICATION COURSES

11101 **MEDIA ARTS** (Grade 12) 1 credit non-ranked
(Completion of this course meets 1 credit of the two computer science credits required for graduation)

This year-long course is designed to inspire the student to become a highly effective communicator in a digital age. Students in Media Arts will be exposed to a wide variety of digital media including television, computer, radio, and internet platforms. The application of these media forms will produce both daily announcements to the school highlighting the pertinent news of the day and a weekly broadcast that more deeply explores the student experience. The format of the course will employ an advanced democratic student-centered model that places the learner at the center of the experience and asks the instructor to become a facilitator rather than the focus of the learning. Students will work on advancing techniques in leadership, collaboration, and independent thought and action to work as a team to produce broadcasts of high quality. Essential to the student experience in this course is the ability to be self-motivated and open to new learning styles as the course breaks from the traditional model of education to facilitate deep thought and understanding. The course becomes as much about how to learn as it is about what is learned as students will come to produce high-quality products while expending their abilities to be master communicators in the 21st century.
Prerequisite: Digital Communications and Advanced Digital Communications with 90% or better.

11102 **DIGITAL COMMUNICATIONS** (Grades 10-12) 1/2 credit non-ranked
(Completion of this course meets 1/2 credit of the two computer science credits required for graduation)

This semester long course is designed to introduce students to techniques required to communicate in a 21st century environment. The overall goal of the course is to better prepare students to be effective and efficient communicators in a digital age. Traditional forms of communication including oral speech and the written word have evolved to digital platforms making them both more efficient and complex. To harness the power inherent in digital communication and ensure students become master communicators in a digital world, they will be exposed to various forms of communication including online and video based media platforms. These stated goals of the course will be accomplished through the employment of project and performance based units that seek to allow students to not only become more proficient communicators but also to challenge their abilities to think dynamically and creatively. The course is primarily group-based and students will move through each unit with a team of other young people seeking to create high-level digital projects in a social and collaborative environment.

11104 **ADVANCED DIGITAL COMMUNICATIONS** (Grades 10-12) 1/2 credit non-ranked
(Completion of this course meets 1/2 credit of the two computer science credits required for graduation).

This semester long course is designed to advance the skills and competences that were established in the digital communications course. While the focus of this course is still placed primarily on becoming an effective communicator in a digital world, students will seek to broaden their knowledge of communication techniques as well as their proficiency in communicating using various technological platforms. As students will enter the course with a basic proficiency in communicating using digital media, the emphasis of the course will then shift to using digital media to become more powerful, creative, and dynamic thinkers. The ability to think creatively and solve real-world problems with solutions that may not exist is rarely touched upon in the traditional educational setting. By using a student-centered, project-based approach Advanced Digital Communications will seek to improve the ability of students to be creative and dynamic problem solvers. This broadening ability will be displayed through the use of digital communication techniques as the path to creatively solving future problems will be paved by various technological platforms.
Prerequisite: Digital Communications

11110 **AERIAL VIDEOGRAPHY** (Grades 11-12) 1/2 credit non-ranked
(Completion of this course meets 1/2 credit of the two computer science credits required for graduation).

This semester-long course will explore the exciting and rapidly advancing field of aerial videography. Students in this course will begin by learning the rules and regulations associated with flying unmanned aircraft. Following this understanding, students will learn to fly an advanced video quadcopter by participating in simulated and real-world flight activities. After the basics of flying the quadcopter have been mastered, students will set out on the challenge of capturing the world around them as seen from above. Flying activities will include capturing images on the campus of Meadville High School, various locations within Crawford Central School District, and the surrounding community. As students capture the video images from an aerial perspective, they will also build on video editing skills that they have learned in Digital Communications and Advanced Digital Communications by using Adobe Premiere Pro to edit and produce projects. Students in the course must be dedicated to learning the intricacies of both flying a quadcopter and using it to capture high quality video. The goal of the course will be to train students in the use of a new and exciting technological platform to positively depict the school district and community.

11111 **TECH TEAM I** (Grades 9-12) 1/2 credit non-ranked

This semester-long course will empower students to provide technical support services to students and faculty. The course will be delivered in an asynchronous environment in which students complete self-directed activities meant to increase skills and abilities in areas of personal interest. Additionally, students will provide technical support services to school students and staff professionally and courteously. Students taking the course will complete traditional learning outcomes using the Canvas course management program. Students will report to the designated genius bar location for one class period and complete all course components, including the online components of the course, there. Members of the class will essentially serve as technology support staff to their peers and teachers while enhancing their own knowledge of technology and interpersonal communication through experience and self-direected training.

11112 **TECH TEAM II** (Grades 9-12) 1/2 credit non-ranked

This semester-long course will empower students to provide technical support services to students and faculty. The course will be delivered in an asynchronous environment in which students complete self-directed activities meant to increase skills and abilities in areas of personal interest. Additionally, students will provide technical support services to school students and staff professionally and courteously. Students taking the course will complete traditional learning outcomes using the Canvas course management program. Students will report to the designated genius bar location for one class period and complete all course components, including the online components of the course, there. Members of the class will essentially serve as technology support staff to their peers and teachers while enhancing their own knowledge of technology and interpersonal communication through experience and self-direected training. Additional topics and skill sets can be introduced as students improve and master instructional outcomes.

SOCIAL STUDIES SEQUENCE CHART
2020-2021

	Standard	Academic	Accelerated
Grade 9	**Civics and Government General**	**Civics and Government Academic**	**Civics and Government Accel.**
Grade 10	**19TH Century U.S. History -10**	**19th Century U.S. History – Academic**	**19th Century U.S. History Accel.**
Grade 11	**20th Century World History II**	**20th Century World History - Academic**	**AP Unite States History**
Grade 12	**Contemporary Social Sciences**	**World Government and Economics**	**AP European History**

SOCIAL STUDIES

COURSE OFFERINGS - Grade 9

04106 **CIVICS AND GOVERNMENT** 1 credit A=4

This course will cover the key ideas of civics in relation to American government. This class is being designed to complete the ideals of American government students were introduced to in eighth grade history. They will continue moving forward with the evolution of American government to its present status.

04107 **CIVICS AND GOVERNMENT ACADEMIC** 1 credit A=4

This course will cover the key ideas of civics in relation to American government. This class is being designed to complete the ideals of American governement students were introduced to in eighth grade history. They will continue moving forward with the evolution of American government to its present status. Students should be at the 9th grade reading level. ***NCAA approved course**

04108 **CIVICS AND GOVERNMENT ACCELERATED** 1 credit A=5

This course will cover the key ideas of civics in relation to American government. This class is being designed to complete the ideals of American government students were introduced to in eight grade history. They will continue moving forward with the evolution of American government to its present status. ***NCAA approved course**

COURSE OFFERINGS - Grade 10

04202 **19th CENTURY UNITED STATES HISTORY 10** 1 credit A=4

This is a history survey course of the United States. This course begins after the creation of the U.S. Constitution and concludes with the beginning of World War 1. Students will use critical thinking skills in reading and writing to complete research projects, essays, classroom presentations, and classroom discussions. This course will explore important social, political, and economic issues that contribute to the growth of the United States of America.

04203 **19th CENTURY UNITED STATES HISTORY- ACADEMIC** 1 credit A=5

This is a history survey course of the United States History. This course begins after the creation of the U.S. Constitution and concludes with the beginning of World War 1. Students will be required to examine current issues and participate in various projects relative to the time period covered. Students should be reading on the 9th grade level. Students should be concurrently taking Academic English 9.

***NCAA approved course.**

04205 **19th CENTURY UNITED STATES HISTORY - ACCELERATED** 1 credit A=6

This course begins after the Constitution and concludes with the beginning of World War 1. Students will be required to examine current issues and participate in various projects relative to the time period covered. Students will also be required to read supplementary materials and demonstrate a critical understanding of the materials through oral presentstions and written reports. Students should be reading and writing above the 9th grade level and prepared to enter a rigorous accelerated, college prep environment. Students should be concurrently taking Accelerated English 10.

***NCAA approved course**

COURSE OFFERINGS - GRADE 11

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04308 **20th CENTURY WORLD HISTORY -ACADEMIC** 1 credit A=5

20th Century World History begins with World War 1 and continues to the present. Students will be required to examine current issues and participate in various projects using problem-solving strategies relative to social, political, economic, and cultural issues of the time period. The students will use critical-thinking skills in reading and writing to complete research projects, essays, classroom presentations, discussions, and independent reading assignments. **Prerequisite: Students will also be responsible for summer reading**.

NCAA approved course

04303 **AP UNITED STATES HISTORY** 1 credit A=6

Advanced Placement United States History is a full year course taught on a college level of ability. A college text is utilized along with a novel to read in the summer and a minimum of three during the school year. Weekly reading quizzes and monthly unit exams evaluate academic progress.

The College Board sponsored national examination is mandated for each enrolled student. There is a fee to take this annual AP exam that can lead to the earning of college credit(s). * Students will be required to take the AP exam.

There is a great deal of academic rigor associated with AP United States History. For the student who desires to gain and interpret United States History on a high level ability, the course is a valuable challenge.

Prerequisite An "A" or "B" in Advanced Composition/Language & Human Behavior

NCAA approved course

In this course the student will have the opportunity to:

1. master a broad knowledge of United States history
2. demonstrate an understanding of great issues in chronological United States history
3. use historical data to support an argument or position
4. differentiate between various historiographical schools of inquiry
5. interpret and apply data from original documents, graphs, cartoons, letters, etc.
6. understand beliefs of democracy and the continuation of the democratic process
7. develop a self-reliant ability to study independently to a greater degree that the conventional secondary United States history course
8. work effectively with others to produce products and solve problems
9. learn to take orderly notes from basic and supplemental texts and classroom presentations/lectures
10. prepare for and successfully pass the Advanced Placement U.S. History exam

COURSES OFFERINGS – GRADE 12

04807 **CONTEMPORARY SOCIAL SCIENCES** 1 credit A=4

This course will study the branch of science that deals with the sociocultural aspects of human behavior. Social Sciences will include learning key information and research in economics, political science, sociology and psychology. Students will be expected to participate in reading selections, course discussions and projects and presentations.

NCAA approved course

04401 **WORLD GOVERNMENTS AND ECONOMICS** 1 credit A=5

This course is designed to provide a challenging in-depth study into the workings of past and current political and economic systems. The demands on the course will be more rigorous than the conventional secondary political science and economics course.

The course will focus on the principles of government such as political structures and systems and inner workings of world governments.

The economics section of the course will center around traditional economic theory. A strong background in mathematics and reading is necessary for successful completion of course work. It will focus on the study of economic systems such as traditional command, market, and mixed economics. The course will include in-depth research of the stock market, investment, and both microeconomics and macroeconomics theory.
Prerequisite: teacher recommendation and an A or B in 20th Century World History acad. or a "C" w/ teacher regards and a passing grade in 04303 AP United States History.

NCAA approved course

04304 **AP EUROPEAN HISTORY** 1 credit A=6

European History 12-1 is a senior college-level course for which Advanced Placement American History is a prerequisite. The course begins with the Renaissance, and provides for an in-depth study of the major developments in Europe to the present day. Analytical skills and writing skills aid the student in preparing for the demands of college work. In May the national Advanced Placement European History test is given, and the student is required to take it. Those who qualify may earn credits from a college which recognizes Advanced Placement Testing. **Prerequisite: An A or B in AP US History strongly recommended and teacher recommendation.**

NCAA approved course

MASH MATHEMATICS SEQUENCE CHART
2020 - 2021

	Practical	Academic	Academic II	Accelerated
Grade 9	Practical Algebra A	Academic Algebra I	Academic Algebra II	Accelerated Algebra II
Grade 10	Practical Algebra B	Academic Algebra II	Academic Geometry	Accelerated Geometry
Grade 11	Practical Geometry	Academic Geometry	Pre - Calculus	Elementary Functions
Grade 12	Consumer Math (seniors only)	Pre-Calculus	Academic Calculus	AP Calculus AB

Electives: ----------
- Academic Calculus
- Selected Topics
- AP Statistics
- Intro. Trig / Rev. Algebra II
- Academic Statistics

MATHEMATICS COURSES

02401 **CONSUMER MATH** (Grade 12) 1 credit A=4

This is a general mathematics course which focuses on typical, everyday consumer problems where basic mathematical skills must be applied. The course includes essential family life topics such as transportation, food, clothing, and shelter. Personal finance topics such as income, banking, taxes, credit, budgets, insurance are among the other topics covered in the course. **Prerequisite: Must be a senior to take this course. (Only for seniors)**

02105 **PRACTICAL GEOMETRY** 1 credit A=4

This course studies plane and solid geometry using modified proofs, while emphasizing the use, understanding, and applications of geometric concepts. This course is intended to provide a more hands-on approach to geometry. This course will provide students with the skills necessary for future explorations in both college and various careers. **Prerequisite: Completion of course Practical Algebra B.**

02204 **GEOMETRY** (Academic) 1 credit A=5

This is the usual plane geometry course for the high school student who has completed Algebra I. Approximately one-fourth of the course is devoted to exercises with proofs. A review of algebra topics is provided throughout the course. Topics in geometry that use proof include the study of basic undefined terms, definitions, postulates, and theorems to explore the properties of segments, angles, parallel and perpendicular lines, polygons, and circles. Other topics presented include areas of plane figures, volumes of solids, constructions, some basic right triangle trigonometry, The Pythagorean Theorem, locus of points, and coordinate geometry, transformations (reflection, rotation, size), three dimensional surfaces, perspective drawing. **Prerequisite: Algebra I with a 75% or higher.**

NCAA approved course

02302 **GEOMETRY** (Accelerated) 1 credit A=6

This course provides an in-depth exploration of Euclidean Geometry. It is proof-oriented, includes the study of both plane and solid geometry, and introduces transformation geometry, Algebra II skills are maintained throughout the course, but a strong background in Algebra II and an above average ability to reason are prerequisites for enrollment. **Prerequisite: Accelerated Algebra II with a "B" or higher.**

***NCAA approved course** (Cannot be taken in conjunction with Elementary Functions)*

02106 **SELECTED TOPICS** (grades 10th-11th) 1 credit A=4

This course is designed for those students who plan to further their education beyond high school and will prepare them for college and/or career explorations. Selected Topics will provide mastery of operational skills with polynomials and rational expressions, graphing and solving of linear equations, and determining probability as studied in Algebra I. This course will also review hands-on and relevant Geometry concepts needed to solve real-world applications problems. Selected Topics will also be an introduction to Algebra II with solving quadratic equations using factoring, the quadratic formula, and completing the square. If time allows, there may also be an introduction of simple trigonometric functions. **Prerequisite: Completion of both Practical Algebra A and B (Maths 02102 & 02103), and in conjuction with Practical Geometry (Math 02105) or Academic Geometry (Math 02204)**

***NCAA approved course**

02102 **PRACTICAL ALGEBRA A** (Grade 9) 1 credit A=4

This course is designed to give each student Algebra I concepts at a modified pace. Topics to be covered include variables, rational numbers, solving equations, order of operations, linear equations and functions, graphing, slope, and rate of change. Students who successfully complete this course will move on to take Practical Algebra B. **Prerequisite: Grade 8 Pre-Algebra.**

***NCAA approved course for (1/2 credit)**

02103 **PRACTICAL ALGEBRA B** (Grades 10-11) 1 credit A=4

This is the second course in the Practical Algebra sequence. Topics to be covered include solving and graphing inequalities, systems of equations and inequalities, data analysis concepts, as well as polynomials. Upon completion of the Practical A and B courses, students will have completed a full year of Algebra I. Students will take the Algebra I Keystone Exam at the conclusion of this course. This course provides students with the necessary skills required for college and career explorations. **Prerequisite: Practical Algebra A.**

***NCAA approved course for (1/2 credit)**

02207 **ALGEBRA I** (Academic) (Grades 9-12) 1 credit A=5

This is the first course in Algebra for students in the college preparatory sequence. The students will review and master the concepts of rational numbers and perform the four basic operations.

Students will master algebraic manipulation to solve, equations, inequalities, and expressions. Mathematical problem solving strategies will be recognized, formulated, and applied by the students, and they will formulate mathematical definitions and express generalizations discovered through investigation. The student will be exposed to experiences that reinforce and extend logical reasoning skills. **Prerequisite: Completion of Pre-Algebra with a "C" or better. Students may retake in 9th grade after 8th grade Algebra I or after Practical Algebra A with teacher recommendation.**

****NCAA approved course***

02301 **ALGEBRA II** (Accelerated) (Grade 9) 1 credit A=6

This is an accelerated second course in algebra, which is offered at a higher level than Algebra II. It emphasizes applications and connections with the real world. Problems are solved using more than one strategy. Critical thinking skills are required in solving challenging problems; mere memorization and substitution into formulas do not suffice as problem-solving techniques. Students must communicate mathematically. Concepts studied in this course include transformations of linear and quadratic functions, graphing quadratic functions, understanding properties of quadratic functions, solving quadratic equations, simplifying radical expressions, using complex numbers, and operations with polynomial and rational expressions. **Prerequisite: Algebra I in 8th grade with a "B" or higher. Need to pass Algebra I Keystone.**

****NCAA approved course***

02305 **ALGEBRA II** (Academic) (Grade 10-12) 1 credit A=5

The Algebra II curriculum includes the refinement and extension of mathematical relationships begun in Algebra I, while developing algebraic skills necessary for higher mathematics. Equation solving is emphasized with application to the solution of word problems. Concepts studied in this course include graphing quadratic functions, understanding properties of quadratic functions, solving quadratic equations, simplifying radical expressions, using complex numbers, and operations with polynomial and rational expressions. **Prerequisite: "B" average in Algebra I .**

****NCAA approved course***

02309 **ALGEBRA II** (Academic) (Grade 9) 1 credit A=5

The Algebra II curriculum includes the refinement and extension of mathematical relationships begun in Algebra I, while developing algebraic skills necessary for higher mathematics. Equation solving is emphasized with application to the solution of word problems. Concepts studied in this course include graphing quadratic functions, understanding properties of quadratic functions, solving quadratic equations, simplifying radical expressions, using complex numbers, and operations with polynomial and rational expressions. **Prerequisite: "B" average in Algebra I.**

NCAA approved course

02208 **INTRODUCTION TO TRIGONOMETRY WITH A REVIEW OF ALGEBRA II** 1 credit A=5

This course is designed for students who have already passed an Algebra II course, but who need a review of skills not yet mastered from Algebra II. It is also an introduction to trigonometry designed for students going to college, but not pursuing a mathematics program, and for students developing trade skills that make direct use of trigonometry.

The topics from Algebra II that will be reviewed include exponents and radicals, algebraic fractions and fractional equations, simultaneous linear equations, inequalities, quadratic equations, matrices, and graphing in the Cartesion Coordinate System.

The topics from Trigonometry covered include trigonometric functions, graphs of trigonometric functions, identities, the trigonometry of any triangle, inverse trigonometric functions, circular functions and their application, and complex numbers in polar form. Also application to trigonometry will be made to such areas as navigation, angular velocity, force, surveying, and construction. **Prerequisite: Math 02305 (Algebra II) with a C or higher.**

NCAA approved course

02206 **PRE-CALCULUS** (Academic) 1 credit A=5

This is the usual Pre-Calculus course for high school students planning to attend college, especially for those students who plan to pursue careers requiring some higher mathematics. It is not as rigorous as Math 02303 (Elem. Functions). The course is intended to acquaint the student with increased use of technical language and symbols in the presentation of definitions, postulates, theorems, and mathematical concepts.

The advanced algebra topics emphasize the definition and concept of a function, the analysis of many types of equations, and curve-sketching techniques for the straight lines and conic sections. Other topics include complex numbers and combinatories and probability

Topics covered in trigonometry include the special angles, identities, radian measure, special formulas, graphs of functions and their inverses, solutions to equations and applications using the Law of Sines, Law of Cosines, and areas. **Prerequisite: Math 02204 (Geometry acd) or Math 02302 (Geometry accel)and a course grade of "High C" (76% or higher) or above in Math 02305 (Algebra II) or Math 02301 (Algebra II accel).**

NCAA approved course

Please Note: A graphing calculator is required –TI 84 Plus

02210 **ACADEMIC STATISTICS** **1 credit A=5**

This course introduces the concepts of statistics. It will extensively use the graphing calculator with a statistics package for ease computation. The topics will include describing data, analyzing data, quantitative reasoning, and mathematical modeling. Other mathematical topics may be included as time and circumstances warrant. The course will include activities and some non-traditional assessments. This course is in the normal sequence for students who have taken or are presently taking Math 02303 (Elementary Functins) or Math 02206 (Pre Calculus Academic). It is available as an elective, for all students who meet the prerequisite. **Prerequistie: Math 02206 (Pre - Calculus Academic), Math 02303 (Elem. Functions). May be taken at the same time as Math 02206 and Math 02303 ****NCAA approved course***

Please Note: A graphing calculator is required –TI 84 Plus

02214 **AP Statistics** 1 credit A=6

This course is a college level course in statistics which covers the AP Syllabus for AP Statistics. The course examines topics such as data collection methods, experimentation, graphical and numerical descriptive statistics, analyzing bivariate data, probability, probability and sampling distributions, confidence intervals, hypothesis testing, comparing two treatments, analyzing categorical data, and inferential methods. The course uses graphing calculators and computers to enhance the development of statistical understanding through exploring data, analyzing data, and assessing models. Students may earn college credit for Math 02214 (AP Statistics) by taking the AP exam. **Prerequisite: Math 02303 (Elem. Functions) with a grade of 80% or higher. May be taken at the same time as Math 02303.**

NCAA approved course
*Students who enroll in AP Statistics are expected to take the AP Exam.

Please Note: A graphing calculator is required – A TI-83 Plus or a TI-84 Plus

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02303 **ELEMENTARY FUNCTIONS** 1 credit A=6

This is a highly theoretical pre-calculus course which also fulfills the trigonometry requirement of students in the AP sequence. The course includes a rapid review of logic and methods of proof, the real and complex number system, and algebra (operations with polynomials, exponents and radicals, solutions to equations and systems of equations, inequalities, and graphing). The emphasis of the course is on the concepts of relation and function, domain and range, inverses, and curve-sketching as needed for the calculus. Algebraic functions (polynomials, rational, explicit algebraic) and their roots are given extensive treatment. Transcendental functions (exponential and logarithmic, trigonometric and inverse trigonometric) are carefully defined and their properties, graphs, and identities are thoroughly examined. The trigonometric functions are presented both as functions of angles and functions of real numbers. Topics from analytic geometry are included as time permits. **Prerequisite: Completion in Math 02302 (Geometry accel) and or 02301 (accel Alg II) with a grade of "B" or higher.**

NCAA approved course

Please Note: A graphing calculator is required – A TI-83 Plus or a TI 84 Plus

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02209 **ACADEMIC CALCULUS** 1 credit A=5

This course will present concepts of Calculus and its applications in a non-rigorous manner. The students will use the graphing calculator to practice the course concepts and applications. The topics to be covered include: functions and their graphs, limits, continuity, derivatives and their applications, and integrals. This course is not intended to prepare students for the AP Exam or to provide college credit. **Prerequisite: Math 02206 (Pre-Calculus Academic) or Math 02303 (Elem. Functions) with a grade of 80% or higher.**

NCAA approved course

02304 **AP CALCULUS AB** 1 credit A=6

This course is a college level course in calculus which covers the AP Syllabus for AB Calculus. The course reviews topics from elementary functions and analytic geometry, eg: distance formula, conic sections, polar coordinates, para-metric equations, trigonometry. The course devotes itself primarily to the concepts of limits and continuity, the derivative, and the definite and the indefinite integrals, carefully defining each and examining properties and methods of differentiation and integration with applications. Students may earn college credit for Math 02304 (AP Calculus-AB) by taking the AP test or enrollingin the College in High School Program. **Prerequisite: Math 02303 (Elem. Functions) with a grade of 90% or higher and permission of the course instructor.**

NCAA approved course
*Students who enroll in AP calculus are expected to take the AP Exam

COMPUTER SCIENCE AND CODING

03109 **INTERACTIVE TECHNOLOGIES I** (Grades 9-12) .5 credit (non-ranked)

This semester course is designed around Science, Technology, Engineering, and Mathematics. Dive into porjects that explore how computers work, writing code, creating apps, controlling robots and more. Begin your journey into engineering with this completely hands-on course.

03110 **INTERACTIVE TECHNOLOGIES II** (Grades 9-12) .5 credit (non-ranked)

This semester course is a continuation of Interactive Technologies I. This class digs deeper into projects that explore using sensors in writing code, creating apps, controlling robots and more. Use this completely hands-on course to explore the technology around you. **Prerequiste: Interactive Technologies I.**

12307 **AP COMPUTER SCIENCE PRINCIPLES** (Grades 9-12) 1 credit A=6

This course is replacing "Computer Programming I" and is designed to be an entry level exposure to the world of computer science. Topics will include: the Internet, digital information, programming, data privacy, and building apps. This is not a hard core programming class – it is designed to give anyone insight to all the computer science technology in the world arouond them. Students taking this class are expected to take this entry level AP exam. **Prerequisite: Algebra I or teacher recommendation**

12304 **INTRODUCTION TO JAVA** (Grades 10-12) 1 credit A=5

This course emphasizes a structured approach to programming in JAVA. Students will be focusing on Object-Oriented-Programming. Programming will include: logical operations, conditional statements, iteration, arrays and more. This is a good course for students who plan to study computer science, engineering, or advanced mathematics in college. **Prerequisite: Successful completion of AP Computer Science Principles or Interactive Technologies I and II or teacher recommendation.**

12305 **AP COMPUTER SCIENCE** (Grades 11-12) 1 credit A=6

Computer Science A emphasizes Object-Oriented- Programming methodology with an emphasis on multilevel problem solving, algorithm development and abstraction. This is meant to be the equivalent of a first-semester college course in computer science. Students taking this class are expected to take the AP exam. **Prerequisite: Introduction to JAVA**

12303 **INDEPENDENT STUDY IN COMPUTER SCIENCE** (Grades 12) 1 credit **or** .5 credit (non-ranked)

This is an independent study in Computer Science. Each student will propose a project of study that involves some aspect in computer coding that must be accepted by the supervising teacher. **Prerequisite: AP Computer Science A (JAVA) and have taken the AP Computer Science A Exam and teacher recommendation.**

SCIENCE SEQUENCE CHART
2020 - 2021

(Please note-Sequence chart is starting 2019-2020)

Level	9th Grade	10th Grade	11th Grade	12th Grade
Accelerated	Honors Biology	Honors Chemistry	AP Physics I AP Chemistry	AP Biology AP Chemistry AP Physics II
Academic	Academic Biology	Academic Chemistry	Academic Chemistry Academic Physics	Academic Physics
Conceptual		Conceptual Chemistry Conceptual Physical Science	Conceptual Chemistry Conceptual Physical Science	Conceptual Chemistry Conceptual Physical Science
Electives			Astronomy/Geology Advanced Chemistry II	Astronomy/Geology Senior Biology Advanced Chemistry II Independent Study Calculus-Based Physics

*Current 10th graders must take Honors Chemistry,
Or Academic Biology

SCIENCE COURSES

03210 **ASTRONOMY** (Grades 11-12) 1/2 credit A=5

This is an introductory course designed for academic students. It includes sections on constellation identification, history of astronomy, as well as contents of the solar system and stellar evolution.

NCAA approved course

03211 **GEOLOGY** (Grades 11-12) 1/2 credit A=5

Geology is meant to be an academic level course for those students who are not mathematically inclined. It is meant to round out the year for those students interested in one semester of Astronomy. This course will introduce: broad geologic topics such as the geologic time scale, plate tectonics, minerals, rocks, landforms and more.

03202 **ACADEMIC BIOLOGY** (Grades 9) 1 credit A=5

This course is for the college bound students who have achieved success in level 1 or 2 science in 8th grade. By both lecture and laboratory procedures, an attempt is made to expose the student to the basic principles and ideas of biology in accordance with Pennsylvania academic standards in order to prepare them for college.

NCAA approved course with lab

03306 **HONORS BIOLOGY** (Grades 9-10) 1 credit A=6

Oriented to the high achieving college bound student. Entrance to this class is based on ability and teacher recommendation. Time is spent in class in more detailed lecture and laboratory procedures to bring out principles and ideas in modern biology in accordance with Pennsylvania academic standards. This course is adapted to the science oriented student who will possibly enter a profession involving science. (Accelerated College Preparatory Course). **Prerequisite: Concurrent enrollment in Algebra II.**

NCAA approved course with lab

03207 **SENIOR BIOLOGY** (Grade 12) 1 credit A=5

The course is designed for students interested in entering any of the health care related fields. Anatomy and physiology of both human and animal systems are studied. Dissections and lab projects are an integral part of the course. **Prerequisite: Acad. Chemistry and Acad. Biology with a grade of "C" or better. Practical Chemistry with a grade of 85% or better and teacher recommendation.**

NCAA approved course with lab

03309 **AP BIOLOGY** (Grade 12) 1.25 credit A=6

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore topics like evolution, energetics, information storage and transfer, and system interactions. This course should appeal to students interested in careers in biology and medicine. This course follows the recommended AP College Board curriculum. Summer work may be assigned to accommodate the non-lab sections of the course. **Prerequisite: (B) or better in Honors Chemistry and (B) or better in Honors Biology.**

NCAA approved course with la

03103 **CONCEPTUAL CHEMISTRY** (Grades 10-12) 1 credit A=4

A first-year survey course in basic chemistry using a qualitative approach, teaching chemistry concepts using societal issues. Real-world examples expose students to conceptual applications in material science, environmental chemistry, organic chemistry, biochemistry, and industrial chemistry. Coursework is project based focusing on modeling and inquiry via research and laboratory exercises. Students work in teams and collaborate, apply learning, and evaluate potentially real-life problems.

03205 **ACADEMIC CHEMISTRY** (Grades 10-12) 1.25 credit A=5

This full year introductory course in general chemistry is open to 10th, 11th and 12th grade students. Topics include nomenclature, reactions and stoichiometry, atomic structure, periodic law, ionic and covalent bonding, kinetic molecular theory, gas laws, and acids and bases. In the laboratory sessions chemical experiments are conducted by the students. **Prerequisite: (C) average in Algebra II or concurrently enrolled in Algebra II. *It is necessary to have a TI30 calculator.***

NCAA approved course with lab

03307 **HONORS CHEMISTRY** (Grades 10-12) 1.25 credit A=6

This course is open to 10th and 11th grade students. This advanced program course covers basic topics in chemistry. This is a mathematically rigorous course that explores the subjects presented in detail and at an accelerated pace. In addition to the material taught in Chemistry (acad), topics such as gas laws, chemical equilibria, oxidation reduction and chemical controls are included. Theoretical experiments of various nature are conducted by the students in the laboratory. **Prerequisite: (B) average in Algebra II.** It is necessary to have a TI30 calculator for this course.

NCAA approved course with lab

03310 **AP CHEMISTRY** (Advanced Placement) (Grade 11-12) 1.25 credit A=6

This course is taught on the level of an introductory college freshman course, with more detail in the subject matter. This course should appeal to students interested in science education, medical areas, and chemical engineering. Chapters 1, 2 and 3 are completed in the summer by on-line test. **Prerequisite: (A) average in Academic or Honors Chemistry (formerly Accelerated Chemistry**). Highly recommended to have a TI83 calculator for this course.

NCAA approved course with lab

03206 **ACADEMIC PHYSICS** (Grades 10-12) 1.00 credit A=5

This introductory course meets every day. Some of the areas covered are measurement, mechanics, energy and electricity. Its intention is to acquaint the student with the field of physics without over-emphasis in the particular areas of study. **Prerequisite: Algebra I in which a final grade of (B) or better has been obtained and currently enrolled in a Trig. course**. Simple two line alpha numeric calculator needed.

NCAA approved course with lab

03308 AP PHYSICS I (Grades 11-12) 1.00 credit A=6

This is an AP laboratory course that meets every day. It is designed to meet the requirements for students to be able to sit for the AP Physics 1 (algebra-based) exam. The course will explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. This is a mathematically rigorous course that will explore the subjects presented in great detail and at an accelerated pace. The focus will be on inquiry-based analyses of the properties of objects and systems, and their interactions. ***Highly recommended to have TI30 calculator or better for this course.*** **Prerequisite: students should be currently enrolled in or have completed Elementary Functions or Pre-Calculus Academic; or completed Algebra II Academic with a final grade of (B) or better, and with permission from the course instructor.**

****NCAA approved course with lab***

03311 **AP PHYSICS II** (Grade 12) 1.25 credit A=6

This is an AP laboratory course that meets every day. It is designed to meet the requirements for students to be able to sit for the AP Physics 2 (algebra-based) exam. The course will explore principles of fluids, thermodynamics, electricity, magnetism, optics, and topics in modern physics. This is a mathematically rigorous course that will explore the subjects presented in great detail and at an accelerated pace. The focus will be on inquiry-based analyses of the properties of objects and systems, and their interactions. ***Highly recommended to have TI30 calculator or better for this course.*** **Prerequisite: AP Physics 1; students should be currently enrolled in or have completed Elementary Functions, Pre-Calculus Academic, AP Calculus, or Academic Calculus.**
****NCAA approved course with lab***

03114 **CONCEPTUAL PHYSICAL SCIENCE** (Grades 10-12) 1 credit A=4

Conceptual Physical Science provides an environment for teaching Physics and Chemistry, focusing on the key concepts of physics and chemistry, with limited application of basic mathematics. The goal of this course is to provide an appreciation for the intricate and dynamic elements of matter and the natural phenomena that life, this planet, and the universe present. Physics topics include light, sound, motion, machines, forces, and energy. Chemistry topics include atoms, compounds, metals, nonmetals, periodic table, crystals, solutions, acids, bases and salts. Prerequisite: none.

03315 **ADVANCED CHEMISTRY II** (Grade 11-12) 1.25 credit A=6

This course is taught on the level of an introductory college freshman course. This advanced program course covers but not limited to Nuclear Chemistry, Organic Chemistry, Physical Chemistry, Analytical Chemistry, Biochemistry and Modern Methods of Chemical Analysis. This course should appeal to students interested in science education , medical areas, and chemical engineering. **Prerequisite: (A) average in Academic, Honors Chemistry or (B) average in AP Chemistry and (B) average in Honors, Academic Physics**. It is highly recommended to have a T183 calculator or better for this course.
****NCAA approved course with lab***

03313 **INDEPENDENT STUDY CALCULUS BASED PHYSICS** (Grades 11-12) 1 credit A=6

This is an independent study calculus-based physics course designed for students who have taken or are concurrently taking a calculus course, to prepare students for a college-based physics curriculum and/or to prepare students who wish to sit for the AP Physics C Mechanics and/or Electromagnetics exams. Students can choose to concentrate on just mechanics, just electromagnetics, or both. Under mechanics, the topics covered will be linear and rotational kinematics, Newton's laws of motion and gravity, work, energy, and power. Under electromagnetism, the topics covered will be electrostatics, conductors, capacitors, inductors, electric circuits, magnetic fields, and electromagnetism. Students who enroll in this course will be required to purchase an AP Physics C study guide, that will cost approximately $15.00. The teacher will let students know which study guide to purchase at the beginning of the school year.
Prerequisites: Completed or concurrently enrolled in either Academic Calculus or AP Calculus AB; and completed or concurrently enrolled in AP Physics II

WORLD LANGUAGE COURSES

All languages are NCAA approved courses

06101 **FRENCH I** 1 credit A=5

This course serves as an introduction to the language. Basic vocabulary and grammar structures form the foundation for further study. Students will be introduced to French culture and way of life.

06102 **FRENCH II** 1 credit A=5

French II is designed to build upon the knowledge and skills established in French I with a continuation of vocabulary and grammar study. Students will be able to communicate in three basic tenses. Students will also have the opportunity to improve the areas of speaking, listening, reading, and writing.

06103 **FRENCH III** 1 credit A=5

French III students will begin to fine tune their knowledge of grammar with more sophisticated language structures. The material includes a review and augmentation of vocabulary. Longer passages are read in this class. including a short novel in French. Students also continue the study of French culture.

06105 **FRENCH IV** 1 credit A=6

The students will master many grammar concepts and tenses and increase vocabulary. Reading, writing, listening, and speaking skills are emphasized. More free composition takes place. A novel is read as part of this class.

06106 **FRENCH V** 1 credit A=6

Advanced grammar concepts are studied at a college level. Students become acquainted with famous French authors and acquire vocabulary through the reading of a variety of literature. All students will prepare and present a project on some cultural aspect in the target language. Use of the language in spoken and written communication is emphasized. Students study many aspects of culture in depth. Preparation for college level language courses is a goal. Students may take the AP exam, but it is not required.

06201 **SPANISH I** 1 credit A=5

This course is designed to introduce the students to a second language and to develop interest in customs and life in Spanish speaking countries. The emphasis is in vocabulary, grammar, writing, reading, and speaking.

06202 **SPANISH II** 1 credit A=5

This course is designed to build upon the knowledge and skills established in Spanish I with a continuation of vocabulary and grammar study. Students will be able to communicate in three basic tenses. Students will also have the opportunity to improve the areas of speaking, listening, reading, and writing.

06203 **SPANISH III** 1 credit A=5

This course is designed to help the student understand conversations and written Spanish. Conversation is emphasized, with a build-up in vocabulary and grammatical tenses.

06205 **SPANISH IV** 1 credit A=6

The two primary goals of Spanish IV are acquisition of cultural knowledge and real life application of the Spanish language. Students will develop their knowledge and understanding of Spanish through a variety of activities using authentic Spanish resources. An important part of the class will be the building of vocabulary. The students will also master a variety of tenses and grammatical structures, which will enrich their ability to communicate in Spanish. In addition, students will become familiar with some of the major literary works of the Spanish speaking world.

06206 **SPANISH V** 1 credit A=6

In Spanish V, students will refine their Spanish skills and deepen their cultural understanding. This class will focus on the fine tuning of grammar and the acquisition of more advanced vocabulary, as well as enriching each student's reading, writing, speaking, and listening proficiency. The classroom activities will focus more on real-life situational activities and less on textbook exercises. This class will help the students to prepare for college placement tests, as well as for the AP Spanish Language Exam. Students will have the option of taking the AP Spanish Language Exam in May, but it is not required for the class.

06301 **GERMAN I** 1 credit A=5

The direct approach is used to teach German I since it encourages the students to associate a German response with a German question. This develops a thinking pattern in German. Reading, writing, speaking, aural comprehension and culture are equally emphasized.

06302 **GERMAN II** 1 credit A=5

The direct approach is used to teach German II. More emphasis is placed on reading, but it does not take priority over writing, speaking, or aural comprehension. Stories are used as a basis for discussion, the development of vocabulary using synonyms and antonyms, and the re- enforcement of grammar. Vocabulary, therefore, is developed by pictures, sounds, and role playing. Literal translations occur less often. Culture is developed through articles, discussions, films, and podcasts.

06303 **GERMAN III** 1 credit A=5

German III continues to use the direct approach to encourage and help the student to develop his/her thought process in German. Speaking, reading, and writing are equally emphasized. Culture is also developed through materials such as films, landmarks, DVD's, CD's, German TV culture programs, Internet, and podcasts.

06304 **GERMAN IV** 1 credit A=6

German IV continues to use the direct approach to encourage and help the student to develop his thought process in German. The student is expected to read more since this is the best method to develop vocabulary and see grammar applied simultaneously. Cultural development continues through the use of supplementary materials such as films, books, Internet, German TV, music, and podcasts.

06305 **GERMAN V** 1 credit A=6

This course of study will provide the students the opportunity to apply their acquired skills in reading literature, writing short paragraphs, and speaking short dialogues. Application of the language is stressed in this course. The students will have the option of taking the AP German exam.

COLLEGES THAT REQUIRE A WORLD LANGUAGE FOR ADMISSION NORMALLY PREFER THE APPLICANT TO HAVE HAD AT LEAST TWO YEARS OF THE SAME WORLD LANGUAGE. COLLEGE ENTRANCE REQUIREMENTS FOR WORLD LANGUAGE SHOULD BE CHECKED SPECIFICALLY WITH THE COLLEGE UNDER CONSIDERA

COMPUTER/BUSINESS SEQUENCE CHART
2020 -2021

GRADE 9	GRADE 10	GRADE 11	GRADE 12
Full Year Courses	**Full Year Courses**	**Full Year Courses**	**Full Year Courses**
	Accounting I (10-12)	Accounting I (10-12)	Accounting I (10-12)
		Accounting II (11-12)	Accounting II (11-12)
Semester Courses	**Semester Courses**	**Semester Courses**	**Semester Courses**
Computer Applications & Career Readiness (9-12)	Computer Applications & Career Readiness (9-12)	Computer Applications & Career Readiness (9-12)	Computer Applications & Career Readiness (9-12)
Personal Financial Literacy (9-12)	Personal Financial Literacy (9-12)	Personal Financial Literacy (9-12)	Personal Financial Literacy (9-12)
		Business & Personal Law (11-12)	Business & Personal Law (11-12)
Intro to Marketing (9-12)	Intro to Marketing (9-12)	Intro to Marketing (9-12)	Intro to Marketing (9-12)
Internet & Multimedia (9-12)	Internet & Multimedia (9-12)	Internet & Multimedia (9-12)	Internet & Multimedia (9-12)
Computer Publications (9-12)	Computer Publications (9-12)	Computer Publications (9-12)	Computer Publications (9-12)
		Reality Check: (11-12) 21st Century Success	Reality Check: (11-12) 21st Century Success

BUSINESS COURSES

12101 **COMPUTER APPLICATIONS AND CAREER READINESS**
(Grade 9-12) Semester ½ credit non-ranked

(Completion of this course meets ½ credit of the two computer science credits required for graduation).

This preparatory course, highly recommended for all 9th grade students, will provide hands-on instruction in computer concepts with a focus on career interests and abilities. Software applications include word processing, presentation software, desktop publishing, spreadsheets, databases and various Web 2.0 tools. Proper use and ethical issues of the Internet will be addrressed. In addition, English language arts and mathematics are reinforced.

12204 **ACCOUNTING I** (Grades 10-12) 1 credit non-ranked

(Completion of this course meets 1 credit of the two computer science credits required for graduation).

Accounting is an essential preparatory course for students who are interested in any business career. Students will learn how to analyze and record business transactions. Financial statements will be prepared with an emphasis on how the numbers affect business decisions. Students will also study the importance of ethics in accounting through the use of real world case studies. This course is extremely beneficial for students interested in studying business after high school.

12205 **ACCOUNTING II** (Grades 11-12) 1 credit non-ranked

(Completion of this course meets 1 credit of the two computer science credits required for graduation).

This is a necessary course for any student planning to pursue an accounting career. This is also an excellent course for those students who contemplate focusing on any other business major in post-secondary education. Principles learned in Accounting I will be expanded and Automated Accounting will be introduced. **Prerequisites: Accounting I with a minimum 80% average and teacher recommendation.**

12125 **INTRODUCTION TO MARKETING** (Grades 9-12) 1/2 credit non-ranked

(Completion of this course meets ½ credit of the two computer science credits required for graduation).

This course is designed to provide students with an overview of the field of Marketing. Students will be introduced to various areas of marketing research, the effects of competition, e-commerce, pricing, product development, distribution, promotion and advertising. Students will also explore topics such as marketing technology and the Internet, global marketing, consumer behavior, ethics, and customer service.

12119 **PERSONAL FINANCIAL LITERACY** (Grades 9-12) 1/2 credit non-ranked

(Completion of this course meets ½ credit of the two computer science credits required for graduation).

Personal Financial Literacy is a one semester course that is highly recommended for all students and provides them with valuable skills needed to handle everyday personal business/financial decisions. It is a fast-paced elective that is challenging at times and requires a fair amount of reading and independent assignments. A variety of topics will be covered to include: personal income; benefits; taxes/deductions; inflation; time value of money; consumer rights and responsibilities; budgeting; checking/savings accounts; credit management; debt repayment; bankruptcy; and investments.

Continued:

12121 **INTERNET AND MULTIMEDIA** (Grades 9-12) 1/2 credit non-ranked

(Completion of this course meets ½ credit of the two computer science credits required for graduation).

Students will focus on evaluating and understanding how to use the electronic information resources to create effective multimedia presentations. The course explores Internet based websites, various software packages for presentations, hardware, and other available multimedia resources. Students will effectively use these electronic tools to create individual projects such as Web pages and multimedia slide presentations. **Prerequisites: Computer Applications with a minimum "C" average and teacher recommendation**.

12123 **COMPUTER PUBLICATIONS** (Grades 9-12) 1/2 credit non-ranked

(Completion of this course meets ½ credit of the two computer science credits required for graduation).

This course introduces effective methods to produce up-to-date business communications. Students utilize various computer software packages and the World Wide Web to develop and enhance projects such as itineraries (schedules), calendars, brochures, business cards, resumes, thank-you and cover letters, newsletters, etc. Course projects include a Communications Director simulation for a charity of students' choice and an Advertising Director simulation for a popular Italian restaurant. **Prerequisites: Computer Applications with a minimum "C" average and teacher recommendation**.

12117 **BUSINESS & PERSONAL LAW** (Grades 10-12) 1/2 credit non-ranked

(Completion of this course meets ½ credit of the two computer science credits required for graduation).

Business & Personal Law is a one semester course that is highly recommended for intended business majors and provides the students with a foundation for a college-level business law course. It is a fast-paced elective that is challenging and requires significant reading, note taking, and independent assignments. A variety of topics will be covered to include: contract law; consumer law; negotiable instruments; credit protection; bankruptcy; employment law; sole proprietorships; partnerships,LLCs; corporations; corporate regulations, environmental laws; and cyberlaw.

12102 **REALITY CHECK: 21st CENTURY SUCCESS SKILLS** (Grades 11-12) 1/2 credit non-ranked

(Completion of this course meets ½ credit of the two computer science credits required for graduation).

******THIS CLASS IS REQUIRED STARTING WITH THE CLASS OF 2020 WHO DO NOT ATTEND CCCTC**

This one semester class for juniors and seniors should be taken in the junior year. In the course, we will address options for after graduation to include: attending college; trade/technical training; entering the workforce directly. Throughout the course students will take interest profiling surveys, spend time weighing possible career options, researching opportunities, discussing scholarship opportunities, financial aid, and a variety of soft skills needed in the work environment.

MUSIC COURSE

05303 **CONCERT CHOIR** (Grades 9-12) 1 creditt

Concert Choir is open to any student who enjoys singing. You do not need to audition for this group. Music studied and performed is from all time periods and encompasses many singing styles from musicals, to pop, spiritual and classical, to rock. **Students are responsible for two evening concerts including Holiday and Spring. This is part of the grading criteria for the course**.

05306 **CONCERT CHOIR** (Grades 9-12) 1/2 credit

Concert Choir is open to any student who enjoys singing. You do not need to audition for this group. Music studied and performed is from all time periods and encompasses many singing styles from musicals, to pop, spiritual and classical, to rock. **Students are responsible for two evening concerts including Holiday and Spring. This is part of the grading criteria for the course**.

05320 **TREBLE CHOIR** (Grades 9-12) 1 credit

Treble Choir consists of those voices which sing Soprano or Alto. This is an auditioned group. **Students must schedule an audition time with instructor before registering for the course. Students are responsible for two evening concerts including Holiday and Spring as well as various extra performances around the community throughout the year. This is part of the grading criteria for the course. Course percentage grade is determined by student/teacher contract.**

05329 **TREBLE CHOIR** (Grades 9-12) 1/2 credit

Treble Choir consists of those voices which sing Soprano Alto. This is an auditioned group. **Students must schedule an audition time with instructor before registering for the course. Students are responsible for two evening concerts including Holiday and Spring as well as various extra performances around the community throughout the year. This is part of the grading criteria for the course. Course percentage grade is determined by student/teacher contract.**

05205 **ORCHESTRA** (Grades 9-12) 1 credit

Orchestra is open to all **STRING** players (violin, viola, cello, and bass) as well as selected musicians from Band (brass, woodwind, and percussion) at the discretion of the Music Department. Music studied and performed is from all periods. Students are responsible for two evening concerts including Winter and Spring. This is part of the grading criteria for the course. Students will also be taught in small group lessons with emphasis on positions, proper care and maintenance of the instruments and better intonation. **All STRING students (violin/viola, cello/string bass) are encouraged to register for this course. Course percentage grade is determined by student/teacher contract.**

05208 **ORCHESTRA** (Grades 9-12) 1/2 credit

Orchestra is open to all **STRING** players (violin, viola, cello, and bass) as well as selected musicians from Band (brass, woodwind, and percussion) at the discretion of the Music Department. Music studied and performed is from all periods. Students are responsible for two evening concerts including Winter and Spring. This is part of the grading criteria for the course. Students will also be taught in small group lessons with emphasis on positions, proper care and maintenance of the instruments and better intonation. **All STRING students (violin/viola, cello/string bass) are encouraged to register for this course. Course percentage grade is determined by student/teacher contract.**

05220 **CONCERT BAND** (Grades 9-12) 1 credit

Band members serve in many functions and capacities. The repertoire during the year is varied and includes marches, orchestral transcriptions, popular songs, Broadway selections and original works for Band. Students are responsible for two evening concerts, Winter and Spring as part of the grading criteria for this course. Members of this group also perform in small ensembles for various school and community functions. Pep Band and Jazz Ensemble are selected from the Band's membership. Marching Band is chosen from this membership on a voluntary basis.

05223 **CONCERT BAND** (Grades 9-12) 1/2 credit

Band members serve in many functions and capacities. The repertoire during the year is varied and includes marches, orchestral transcriptions, popular songs, Broadway selections and original works for Band. Students are responsible for two evening concerts, Winter and Spring as part of the grading criteria for this course. Members of this group also perform in small ensembles for various school and community functions. Pep Band and Jazz Ensemble are selected from the Band's membership. Marching Band is chosen from this membership on a voluntary basis.

05203 **MUSIC THEORY** (Grades 9-12) 5 days per week 1 credit

This is an excellent preparation course for those students planning careers in music or for those who want to learn more about the theoretical techniques of music chord harmonies, part writing and composing. Ear training and sight-singing will be explored. **All students must be approved by the Music Instructor before registering for this course.** Piano students and those wishing to learn more about the technicalities of music are also encouraged to sign up for this course. **Music Theory will meet 5 days per week. Semester 1 and 2. This is a full year course. NO EXCEPTIONS.**

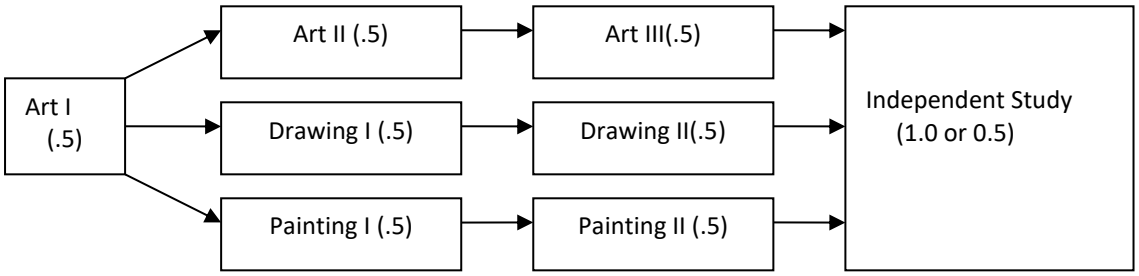
05218 **CLASS GUITAR** (Grades 9-12) 1 credit

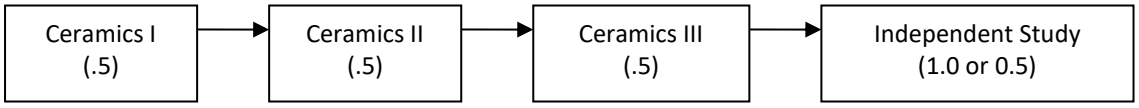
This will be a multi-leveled class for students from beginning level playing to intermediate level of playing. **All students must be approved by the Music Instructor before registering for this course.** Students need a working classical or acoustic guitar (NO ELECTRIC OR BASS GUITARS). Students are responsible for one evening performance in the Spring. This is part of the grading criteria for the course. Students will be taught individually, in small groups and as an ensemble throughout the course of each week. Skills to be learned are note reading, chords and their structure, fingerpicking style and some tablature playing. Students are encouraged to schedule the course for the entire year.

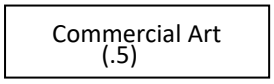
05219 **CLASS GUITAR** (Grades 9-12) (1st semester only) 1/2 credit

This will be a multi-leveled class for students from beginning level playing to intermediate level of playing. **All students must be approved by the Music Instructor before registering for this course.** Students need a working classical or acoustic guitar (NO ELECTRIC OR BASS GUITARS). Students are responsible for one evening performance in the Spring. This is part of the grading criteria for the course. Students will be taught individually, in small groups and as an ensemble throughout the course of each week. Skills to be learned are note reading, chords and their structure, fingerpicking style and some tablature playing. Students are encouraged to schedule the course for the entire year.

ART COURSE FLOW CHART
2020-2021







* Students wishing to take an Independent Study in their **SENIOR** year **must** obtain an application from an art teacher, for recommendation and teacher signature prior to scheduling. Students must have carried an "A" average in all required art courses as shown in the (above) diagram. Independent Study should be reserved for only the most serious art student wishing to hone their skills to the utmost and who posess the capability to self-direct.

* **Independent Study is only offered to students in their senior year.**

ART COURSES

05105 **ART I** (Grades 9-12) (semester course) 1/2 credit

This is a beginning art course in basic drawing, painting, and general methods. Students will have the opportunity to acquire basic skills and techniques through guided practice and exploration in the areas of perspective, color theory, value drawing, mixed media, and design elements and principles utilizing various art mediums.

Submission of a portfolio will be required for final assessment.

05107 **ART II** (Grades 9-12) (semester course) 1/2 credit

Art II is an extension of Art I that will provide the students with additional skills and techniques as well as a review of those previously learned. Students will gain these skills and techniques through guided practice and exploration in the areas of drawing, painting, human anatomy, mixed media and self-proposed work utilizing various art mediums. **Prerequisite: must have successfully completed Art I.**

Submission of a portfolio will be required for final assessment.

05109 **ART III** (Grades 10-12) (semester course) 1/2 credit

This is an advanced course for the more serious art student. Students will be able to hone their skills and abilities for greater enhancement of their art work. Students will be exploring a more professional approach to art. Additional coursework will progress through various aspects of drawing, painting, perspective, mixed media and self-proposed projects in various art mediums. **Prerequisite: student must have successfully completed Art I and II.**

Submission of a portfolio will be required for final assessment.

05119 **CERAMICS I** (Grades 9-12) (semester course) 1/2 credit

Ceramics I is a beginning course providing students with the necessary basic skills needed and the working knowledge of ceramic terminology. Students will work through methods and processes including stamp forming, pinching, coil building, slab building, and sculptural formation.

Submission of a portfolio will be required for final assessment.

05121 **CERAMICS II** (Grades 9-12) (semester course) 1/2 credit

This course is an extension of Ceramics I in which the students will increase their knowledge of terminology and handbuilding skills along with acquiring new skills and techniques on the potter's wheel. Required projects will be formed through the methods and processes of handbuilding and wheelthrowing. **Prerequisite: student must have succesfully completed Ceramics I.**

Submission of a portfolio will be required for final assessment.

05123 **CERAMICS III** (Grades 10-12) (semester course) 1/2 credit

This is an extension of Ceramics II. Students will refine their skills in wheel throwing and further their ability in handbuilding, working toward developing their own artistic style. **Prerequisite: students must have successfully completed Ceramics II with a preferred grade of B.**

Submission of a portfolio will be required for final assessment.

05115 **PAINTING I** (Grades 9-12) (semester course) 1/2 credit

This is a beginning course in acrylic and watercolor painting for those students who are interested in developing their painting skills. Through guided practice, students will gain better painting skills as they explore further techniques through color theory, various styles of master artists, still-life, and realism. **Prerequisite: students must have succcessfully completed Art I.**

Submission of a portfolio will be required for final assessment.

05117 **PAINTING II** (Grades 10-12) (semester course) 1/2 credit

This advanced course in acrylic and watercolor is an extension of Painting I. The course is designed for the more serious student who wishes to hone their painting skills and techniques. Students will work toward developing their own style by progressing through a series of teacher assigned and self-chosen paintings for additional experience and skillbuilding. **Prerequisite: student must have successfully completed Painting I.**

Submission of a portfolio will be required for final assessment.

05125 **COMMERCIAL ART** (Grades 9-12) (semester course) 1/2 credit

This course is designed to introduce students to several basic skills in the Commercial and Graphic Arts field. Students will explore the elements and principles of Graphic Design using various tools, techniques, and types of media. Knowledge gained from this course will give students a business and consumer awareness as well as an opportunity to develop their own creative potential towards a career in art. Students will experience lettering, cartooning, printmaking, graphic design, fashion design, and illustration.

Submission of a portfolio will be required for final assessment.

05130 **INDEPENDENT STUDY** (Grades 12) (full year) 1 credit

This course is developed specifically for students in their senior year of high school, wishing to hone their skills and abilities in the areas of ceramics and /or fine arts. Students will be working independently on self-proposed and teacher guided projects that will allow them to advance in their own artistic style. **Prerequisite: student must have successfully completed Art III, Drawing II, Painting II or Ceramics III with an "A" average and teacher recommendation**.

05134 **INDEPENDENT STUDY** (Grades 12) (semester) 1/2 credit

This course is developed specifically for students in their senior year of high school, wishing to hone their skills and abilities in the areas of ceramics and /or fine arts. Students will be working independently on self-proposed and teacher guided projects that will allow them to advance in their own artistic style. **Prerequisite: student must have successfully completed Art III, Drawing II, Painting II or Ceramics III with an "A" average and teacher recommendation**.

Continued:

05111-05112 **DRAWING I** (Grades 9-12) (semester course) 1/2 credit

This course is designed for the more serious art student who wants to hone their skills in all aspects of drawing. Students will be provided the opportunity to explore various drawing mediums and to learn various techniques that apply to each medium. Students will be creating drawings from various subject matter and mediums such as graphite, charcoal, pen & ink, and pastel. **Prerequisite: student must have successfully completed Art I.**

Submission of a portfolio will be required for final assessment.

05113 **DRAWING II** (Grades 10-12) (semester course) 1/2 credit

This course is an extension of Drawing I for the more serious art student wishing to hone their drawing skills to the utmost. Students will be creating drawings from various subject matter and mediums such as graphite, colored pencil, pen & ink, pastel, and mixed media. **Prerequisite: student must have successfully completed Drawing I.**

Submission of a portfolio will be required for final assessment.

MATERIALS / MANUFACTURING

WOODWORKING .5 credit → ADVANCED WOOD WORKING .5 credit

INTRO TO WELDING .5 credit → WELDING FABRICATING & DESIGN .5 credit

MACHINING .5 credit → ADVANCED MACHINING .5 credit

BASIC CONSTRUCTION .5 credit

ENGINEERING & DESIGN CLASSES

.5 COMPUTER CREDIT except machining

DRAFTING/SOLID WORKS INTRO .5 credit → SOLID WORKS .5 credit → ADVANCED SOLID WORKS .5 credit

MACHINING .5 credit

ALL HAVE COMPUTER CREDITS EXCEPT MACHINING

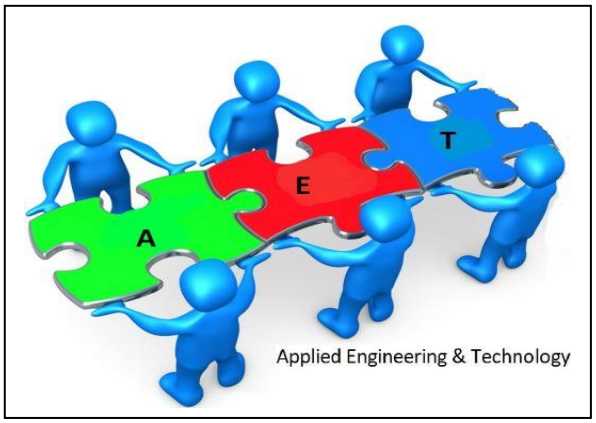
INTRO TO ROBOTIC ENGINEERING .5 credit → ROBOTICS ENGINEERING I 1 credit → ROBOTICS ENGINEERING II 1 credit → ROBOTICS ENGINEERING III 1 credit

VISUAL COMMUNICATIONS

.5 computer credit

VISUAL COMMUNICATION .5 computer credit

DIGITAL PHOTOGRAPHY .5 computer credit → ADVANCED DIGITAL PHOTOGRAPHY .5 computer credit



TECHNOLOGY EDUCATION

13406 **BASIC CONSTRUCTION** (Grades 9-12) 1/2 credit non-ranked

This course will include many aspects of building construction. Students will learn the parts of a basic structure and how they are assembled. A material list will be developed along with material costs for a small structure. Students may build a small building outside which will require students to dress appropriately. **A lab fee of $5.00** will help cover materials used for student projects.

13401 **WOODWORKING** (Grades 9-12) 1/2 credit non-ranked

Woodworking is designed to give students practical experience working safely with hand and power equipment. Students will learn to read plans and directions. Projects will require good measurement skills and a student's ability to work with other students. **A lab fee of $5.00 will be required** to cover some of the materials used by each student.

13404 **ADVANCED WOODWORKING** (Grades 9-12) 1/2 credit non-ranked

The emphasis of this course is wood as a material used in manufacturing. A piece of furniture will be chosen and mass produced as a class project. Students will study all phases of production. The safe operation of stationary equipment, power tools, and hand tools will be stressed. Jigs and fixtures, as well as inventory control and quality control, will be experienced. The finishing process will include: abrasives, staining, and various finishes. At the completion of this course each student will have a completed project. **There will be a $5.00 lab fee based on project costs. Prerequisite: Woodworking with a 75% of better.**

13305 **MACHINING** (Grades 9-12) 1/2 credit non-ranked

This course is an introductory course used to create an awareness of the metals industry. Metal identification and classification, composition, and the history of metal working are topics covered in this course. Hands-on experiences include drawing plans for sheet metal projects. The student will experience scribing, cutting, folding, forming, and fastening procedures. Projects will also include processes pertaining to casting, machining, assembly, and precision measurement skills. Some grading will be based on the student's ability to measure within given tolerances. **Lab fee of $5.00.**

13308 **ADVANCED MACHINING** (Grades 9-12) 1/2 credit non-ranked

This course is a basic introduction to common machine tools and accessories. Introduction includes: precision measurement, basic shop math and inspection techniques. The projects chosen will emphasize use of stationary machines such as: lathes, mills, and drill presses. The inclusion of machining terms, set-up procedures, precision cutting, safety and maintenance will provide students a well-rounded background for advancement. **There will be a lab fee of $5.00. Prerequisite: Machining with a 75% or better.**

13301 **INTRODUCTION TO WELDING** (Grades 9-12) 1/2 credit non-ranked

This course includes basic instruction in gas welding, arc welding, and mig welding. Students will also experience cutting metal plates with plasma arc. Process and safety will be emphasized. This course may be helpful to students interested in the welding course at the Vo-Tech or to any student interested in welding. **There will be a lab fee of $5.00.**

13304 **WELDING DESIGN & FABRICATION** (Grades 9-12) 1/2 credit non-ranked

This course is designed for students who would like to design a project and problem solve through it's entirety. Possible projects: engine stand, ATV ramps, cargo carrier, trailer dolly, storage racks, work bench legs, etc. A fee will be assessed to individual projects. **Lab fee of $5.00. Prerequisite: Intro to Welding with a 75% or better.**

13229 **INTRO TO ROBOTICS ENGINEERING** (Grades 9-11) .5 credit non-ranked

Semester course that introduces students to the basic classes (Drafting, Solid Works, Adv. Solid Works, Machining, Adv. Machining) necessary to design and build a battle robot. Concentrating on Robotics design and layout basics, DC electronics, Materials, Solid Works and Machining skills. Battle bots are not built in this class.

13311 **ROBOTICS ENGINEERING I** (Grades 10-12) 1 credit non-ranked

One year course for students who have one year of experience wih a previous robotics team. Technical Drawing and Machining Skills will be continued and advanced with an emphasis on Solid Works software first semester. Second semester will continue on designing and producing the robot. Second semester will concentrate on designing and producing the robot. Students will also learn basic materials science, basic DC electronic circuitry, marketing and work directly with the local industry.
Prerequisite: (1) Intro to Robotics Engineering with an 80% or better. (2) Drafting or Machining with an 80% or better.

13313 **ROBOTICS ENGINEERING II** (Grades 11-12) 1 credit non-ranked

One year course for students who have at least 2 years of experience with a previous robot team. Course will focus on re-engineering a previous robot, concentrating on failure indentification and design/material superiority.
Prerequisite: Robotics Engineering I with an 80% or better

13314 **ROBOTICS ENGINEERING III** (Grades 11-12) 1 credit non-ranked

One year course for students who have participated on a robot team for the previous 3 years. Course will focus on advanced Solid Works design and engineering solutions to build the most highly engineered robots, working closely with industry experts to prepare them for possible engineering and machining education and careers.
Prerequisite: Robotics Engineering II with an 80% or better

13210 **DRAFTING/SOLID WORKS INTRO.** (Grades 9-12) 1/2 credit non-ranked

This course introduces basic technical mechanical drawing design to students and ends the semester by introducing how Solid Works is used to create solid model design engineering. Basic drafting skills include understanding how to create a multi-view drawing of a solid object, how to read a blueprint, and introduction to computer software based solid model design engineering using Solid Works modeling software. This course is essential to the Robotics engineering course for design, CNC mill operation and 3D printing lab design.

13212 **SOLID WORKS** (Grades 9-12) 1/2 credit non-ranked
(Completion of this course meets 1/2 credit of the two computer science credits required for graduation).

A one-semester course which introduces the student to computer aided drafting. **A prerequisite to this course is Drafting with a 75% or better**. Students will use skills attained in Introduction to Drafting and apply them to projects drawn with CADD software. Areas include menu comprehension, storage, retrieval, and printing or plotting.

13219 **ADVANCED SOLID WORKS** (Grades 9-12) 1/2 credit non-ranked
(Completion of this course meets 1/2 credit of the two computer science credits required for graduation).

This course will allow students to use their engineering skills to develop solutions to designated problems. During the design phase students will use parametric modeling software to design test solutins before using advanced fabrication techniques to create. This problem solving class will use descipline from science, technology, engineering & mathematics. **Prerequisite: Drafting, and Solid Works** Students will also get the opportunity to use CNC software to create an object from their drawings. Movement with axisw x, y are used throughtout Intro to Drafting.

13120 **VISUAL COMMUNICATIONS** (Grades 10-12) 1/2 credit non-ranked
(Completion of this course meets 1/2 credit of the two computer science credits required for graduation).

This course is designed to introduce students to the processes of computer desktop publishing, digital photographic systems, and dry transfer creation and application. Students will have the opportunity to experience and practice these technologies by completing activities such as, T-shirt design, digital photography, advertising campaigns, and greeting card creations, computer printing processes, scanner use, page layout design, and creative advertising principles. The software used for desktop publishing applications will include Pagemaker and Photoshop. Student projects may include custom calendars, greeting cards, brochures, postcards, sports schedules, newsletters, business cards, resumes and cover letters.

13111 **DIGITAL PHOTOGRAPHY** (Grades 10-12) 1/2 credit non-ranked
(Completion of this course meets 1/2 credit of the two computer science credits required for graduation).

This course will give students basic technical skills and experience in camera operation and the capture of interesting subject matter. Students will practice the printing techniques that include the use of computers, printing software, and the digital camera. Students will be guided through the theory and practice of the steps
necessary for successful imaging. The class discussions including scanning, digitizing, Photoshop, special effects and ethics will encourage the student to explore many exciting possibilities.

13114 **ADVANCED DIGITAL PHOTOGRAPHY** (Grades 11-12) 1/2 credit non-ranked
(Completion of this course meets 1/2 credit of the two computer science credits required for graduation).

This course is designed for students interested in expanding past experiences of Digital Photography. Students will explore complex theories of Digital Photography. Advanced photo editing with emphasis on vector images and bit mapped images will be included in this course. Color printing and controlling image quality will also be explored. **Prerequisite: Completion of Digital Photography with a 80% or better.**

22153 **DIVERSIFIED OCCUPATIONS (CO-OP)** (1 year) (grade 12) A=4

The Co-Op/Internship is for qualified home school seniors not currently attending Crawford County Career Tech who wish to participate in Cooperative Education. Students attend MASH for half of the day to complete academic requirements for graduation and spend the other half of the day on the job at school approved work sites.

Employers sign a training agreement with MASH and the student. Grades are based on employer evaluations of the student's work performance.

This program is available only to seniors attending Meadville Area Senior High School. This course does not qualify a student for the CareerTech graduation requirement option.

FAMILY AND CONSUMER SCIENCES

22204 **CHILD DEVELOPMENT** (Grades 9-12) 1/2 credit non-ranked

Roles of the parent and deciding whether to become a parent are topics included in Child Development as well as prenatal care, child care and development up to the end of infancy.

22206 **PARENTING** (Grades 9-12) 1/2 credit non-ranked

Parenting is for the student who is interested in children and child development either from the aspect of a parent or working with children as a career. This course covers the toddler years through adolescence and includes work with preschoolers. **Prerequisite: Child Development**

22208 **FOODS I** (Grades 9-12) 1/2 credit non-ranked

A semester course about everything you always wanted to know about food in your life. Students will learn about kitchen safety and organizational skills. Students will learn all aspects of grain, vegetable, fruit, diary, and protein products.

22211 **FOODS II** (Grades 9-12) 1/2 credit non-ranked

A semester course continuing with everything you always to know about food in your life. You will learn about nutrition basics, health and wellness, and global cultures. **Prerequisite: Foods I**

22214 **TEXTILES & APPAREL I** (Grades 9-12) 1/2 credit non-ranked

Clothing, society, and the fashion world from fashion history to today's fashion industry will be addressed in this course. Care and selection; maintain, repair, redesign and recycle will be explored. This class will include sewing projects, proper way to use a sewing machine.

22217 **TEXTILES & APPAREL II** (Grades 9-12) 1/2 credit non-ranked

This course will include fashion merchandising, clothing construction and home decorating projects. Some sewing supplies may need to be purchased. **Prerequisite: Textiles I**

22221 **MONEY & RELATIONSHIPS** (Grades 11 & 12) 1/2 credit non-ranked

This program will help make relationships work for young adults. It will strengthen the families they live in now and build strong families in the future. This course will teach students economic priciples, how to manage family and personal finances and how to make well-informed purchasing decisions.

PHYSICAL EDUCATION/HEALTH EDUCATION COURSES

08130 **PHYSICAL EDUCATION** (Co-Ed) (Grades 9-12) .5 credit (Half year)

This course will incorporate an assortment of different activities that meet State and National Standards. Activities will include traditional PE ideas as well as new ideas in PE. Students will undergo units such as:

- competitive sport
- team building
- outdoor pursuits
- invasion games
- net/wall games
- lifetime leisure
- fitness
- dance

The goal of this course is to give students the necessary knowledge and skills to become physical literate individuals who are confident in movement and prepared for a lifetime of physical activity.

Each week in this course students will be introduced to beneficial activities outlined in the units above. Students will be informed on why they are learning the activity and how it is applicable to their life outside of Meadville High School. Physical activity preference is personal to each individual. This course allows for the traditional aspect of competitive sports and introduces new activities to broaden student's physical activity knowledge.

This course is aligned with SHAPE America standards 1-5.

08131 **HEALTH & WELLNESS** (Grades 9) 1.0 credit (year long)

Health & Wellness class is a year long course that combines the health classroom and physical flexibility & strengthening plus stress management techniques to help students achieve optimal well – being.

Each week, students will spend two days in the classroom covering health topics including but not limited to nutrition, mental health, physical health, drugs/alchohol, and reproduction. The other three days of the week will be spent doing breathing, mobility and presence-of-mind exercises to increase physical strength and flexibility, to attain proper breathing biomechanics, and manage stress for healthier living. Through movement literacy, students can cultivate self-control and respect for their physical and mental well-being.

Content
Health Component:

- understanding health & wellness
- being an informed health consumer
- achieving mental and emotional health
- managing stress and coping with loss
- healthy relationships
- nutrition
- reproductive health and the life cycle
- alcohol/vaping/tobacco/illegal drugs
- communicable diseases
- noncommunicable diseases
- safety and Injury Prevention
- 1st Aid and CPR

Physical Component:

- benefits of breathing biomechanics
- movement for flexibility
- movement for better posture
- kinesthetic training for physical self-awarness and body control
- centering and presence-of-mind for managing stress and focusing physical energy
- body weight resistance training for strength
- proprioceptive training for balance

08132 **PERSONAL WELLNESS** (Grades 9-12) 1/2 credit / semester long course for PE credit

Personal Wellness class is a semester long course that focuses on each student's personal fitness and wellbeing through a variety of different fitness activities.

Students will have the opportunity to set and achieve personal fitness goals throughout the semester. Activities include, but are not limited to, Weight Training, Cardiovascular Fitness, HITT Training, Body Weight Training and many others.

Sample Goals

- weight loss
- muscular strength gains
- muscular toning
- improved cardiovascular fitness

Content

- weight training
- high intensity interval training
- body weight games
- cardiovascular training
- flexibility
- cardiorespiratory training
- core training
- crossfit activities

08133 **LIFETIME WELLNESS** (Grades 9-12) 1/2 credit,

(Low Impact Activities)

This class will meet five days a week for a semester

The goal is to expose young people to a variety of low impact wellness activities that meet the needs and interest of the students. This class will build muscular strength and endurance, cardiovascular strength and endurance, physical flexibility and stress management techniques to help students achieve optimal physical and mental well-being.

Activities including but not limited to : Fitness walking, flexibility activities, core body strenghening activities. Proper breathing biomechanics, Zumba, personal strategies to manage stress, creative movement, free weight high repetition low weight activities.

08204-08205 **HEALTH EDUCATION** (Grade 9-10) 1/2 credit (Half Year)

Health education will be offered for students in 9th grade. The curriculum is designed to meet the needs and interests of the students with the emphasis on wellness and healthy lifestyles. Units offered pertain to nutrition, mental health, body systems, tobacco, drugs, alcohol, sexuality, human development, AIDS education, sexually transmitted infections, reaching maturity, first aid, and introduction to CPR with possible certification.

SECONDARY GIFTED PROGRAM GRADES 9-12

The Crawford Central School District Secondary Gifted Program is designed to promote challenging learning opportunities both within outside the scope of the regular curriculum, as well as enhance individual student strengths, communication skills, and student self-advocacy and responsibility.

The Secondary Gifted Program will provide programming through collaborative programs, differentiating instruction within the middle or high school curriculum, and acceleration of courses, which may include early access to Advanced Placement courses and college credit. Individual student programming options are made during the GIEP conference.

Acceleration of Courses

Students in grades 9-12 will need to demonstrate proficiency in the course that they intend to challenge. Challenge procedures will be followed according to those outlined in the *Crawford Central Academic Procedures Handbook.*

Collaborative Programs

All gifted students also have the opportunity to participate in different enrichment seminars hosted through a Crawford Central School District collaborative with Allegheny College.

22300 **G.A.T.E.** (Gifted and Talented Enrichment) (grades 9-12) 1credit non-ranked

G.A.T.E. is a workshop-style course in which students capable of doing high-level independent work have a chance to develop a meaningful project in their area of interest. Individually, students will propose, research, and present a complex enrichment project to parents, teachers, and classmates. As a group, students in the class will work on higher-order thinking skills, problem-solving, and creative reasoning. Students will choose books and articles to read and participate in literature circle-style discussions. Students registering for this course should be highly motivated and have interests they would like to pursue at an in-depth level. During the fall semester, students will have the option of participating in a Mock Trial competition program in place of completing an independent project.

22301 **G.A.T.E.** (Gifted and Talented Enrichment) (grades 9-12) 1/2 credit non-ranked

G.A.T.E. is a workshop-style course in which students capable of doing high-level independent work have a chance to develop a meaningful project in their area of interest. Individually, students will propose, research, and present a complex enrichment project to parents, teachers, and classmates. As a group, students in the class will work on higher-order thinking skills, problem-solving, and creative reasoning. Students will choose books and articles to read and participate in literature circle-style discussions. Students registering for this course should be highly motivated and have interests they would like to pursue at an in-depth level. During the fall semester, students will have the option of participating in a Mock Trial competition program in place of completing an independent project.

22401 **Innovation Class** (grades 9-12) 1/2 credit non-ranked

The world needs more problem-solvers – people who can take questions and turn them into ideas and solutions. Innovation Class will teach students how to use their interests and strengths to make a contribution to their community and world. Students will participate in design challenges and creative problem-solving activities. Students will use technology to design and market a product to meet a specific need in our community. **No prerequisite; this class is open to all students.**

LEARNING SUPPORT PROGRAM

The chief aim of the Learning Support Program is to provide the students with the basic skills, academic tools, and knowledge to assume a realistic role in the family, community and society at large.

General requirements for graduation include (1) successful completion of a four year high school program with passing grades, and/or (2) successful completion of occupational training or other academic programs as recommended per the I.E.P. (Individual Education Program) and (3) graduation project.

The Learning Support Program consists of various replacement and collaborative courses as well as tutorial resource classes. Classes consist of freshmen, sophomores, juniors, seniors, and any combination thereof.
Student assignments are made on the basis of I.E.P. conferences.

Replacement classes may consists of math, English, social studies, science, and health. The curriculum content closely follows regular class curriculum. Lessons are designed to meet individual needs and learning styles of students.

Collaborative classes are regular education classes in which a regular subject teacher and a learning support teacher share the responsibility for teaching the course contents. Course content is delivered using various strategies from Project Adapt. Collaborative classes cannot be guaranteed due to scheduling process.

Tutorial resource periods provide the students with tutorial assistance with mainstreamed subjects, improvement of study skills, and organizational skills. This is a non-credited class.

Replacement Courses Offered 2020 - 2021
(by I.E.P. only)
All courses are (1) credit / A=4

9th Grade	**10th Grade**
01501 General English 9	01502 General English 10
02501 General Math 9	02502 General Math 10
04501 General Social Studies 9	04502 General Social Studies 10
03501 General Science 9	03502 General Science 10

(**Prerequisite: Student must have taken Reading Enhancement 9)**

11th Grade	**12th Grade**
01503 General English 11	01504 General English 12
02503 General Math 11	02504 General Math 12
04503 General Social Studies 11	04504 General Social Studies 12
03503 General Science 11	03504 General Science 12

22504-01	**TRANSITIONAL OCCUPATION** (SEGUE-Teacher Recommendation)	(11-12)	3 credits	non-ranked
22504-02	**TRANSITIONAL OCCUPATION** (SEGUE-Teacher Recommendation)	(11-12)	4 credits	non-ranked
RO201	**RESOURCE**	(9-12)		non-ranked
22501	**SOCIAL SKILLS**	(9-12)		non-ranked

CCCTC COURSES

(A.M. Courses = 4 credits / P.M. courses = 3 credits)

20115-20116 **AUTO COLLISION TECHNOLOGY** (3 years) (Grades 10,11, & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

The Auto Collision course includes instruction in the removal of dents, repair of rusted or damaged panels, replacement and installation of parts and accessories, preparation and refinishing of spot repairs, and complete auto painting and refinishing.

Additional learning experiences are provided in using small hand tools, specialized equipment including the most modern tools used in the collision trade, and estimating the cost of repairs.

20103-20104 **AUTO TECHNOLOGY** (3 years) (grades 10,11, & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

This course provides practical instruction in the diagnosis, repair and adjustments of problems related to gasoline-powered motor vehicles. The mechanic must determine what tools and parts are necessary to repair the car, estimate the cost of repairs, and discuss the entire situation with the customer. Areas of study include: transmissions, hydraulic brake systems, electrical and cooling systems, motor tune-up and front end alignments.

17002-17003 **CARPENTRY** (formerly Building Construction Occupations) (2 years)
(grades 11 & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

The curriculum will deal with the erection and installation of buildings and other structures using assorted materials such as metal, wood, glass, concrete, or composition substances. Instruction is provided in the basic skills of carpentry, masonry, and a variety of activities associated with building construction. These include: cost estimating, cutting, fitting, fastening, and finishing various materials. Students will use a variety of hand power tools, learn blueprint reading and following technical properties of materials.

11153-11154 **COMMERCIAL ART AND GRAPHICS** (2 years) (grades 11 & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

Commercial Art is a 2 year program that seeks to provide students with the foundational skills that are required for dozens of occupations within the communication arts. It is now a requirement for future commercial designers to obtain a college degree within their chosen discipline. While it may be assumed that computer and technology skills are most important, this is actually anything but the truth. Having a solid foundation in visual acuity as evidenced through drawing skills is what is most highly sought after by design schools and employers. The program focuses on attaining mastery in drawing, value study, composition, color theory, and creative thinking as well as state of the art computer hardware and software. While students will gain valuable computer skills, often on a higher level than is taught at may university programs, the philosophy of the program is that computer skills are meaningless without the student approaching these tools as an artist.

19100-19101 **COSMETOLOGY** (3 years) (grades 10, 11, & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

The Cosmetology course provides students the training required to become state licensed Cosmetologists. In the exciting world of style and fashion, the Cosmetology classroom is on the "cutting edge". Classroom instruction and clinical experience provide the training needed to perform skills used in today's ever-changing industry. Upon completion of this 1250 required-hour course, the student is prepared to take the state examination for a Cosmetologist license in Pennsylvania. Employment opportunities are limitless as cosmetologists; this license enables cosmetologists to work in any salon, be make-up artists, wedding and event stylists, product educators, sales epresentatives, color specialists, artistic directors, a business owner or many other opportunities.

20106-20107 **DIESEL TECHNOLOGY** (3 years) (grades 10,11, & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

Diesel mechanics repair and maintain diesel engines that power transportation equipment such as heavy trucks, buses, and locomotives, construction equipment such as bulldozers, cranes, and road graders, diesel-powered automobiles. Students are instructed in the operation, testing, and maintenance of diesel-powered equipment. The course includes such areas as: fuel systems, electrical and cooling systems, air intake, and exhaust systems, welding and air conditioning.

16052-16053 **CULINARY ARTS & RESTAURANT MANAGEMENT** (3 years) (grades 10,11, & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

The culinary arts and restaurant managemen course provides the theory and practice of food preparation and service needed to be successful in entry level jobs. Students learn how to operate and care for kitchen equipment, prepare and serve food, plan menus, and operate a cash register. Students practice their serving techniques and learn management skills in the CareerTech restaurant. Students will receive certification from the state after successfully completing a course in safe handling of food and sanitation. Math is taught in forms related to the restaurant industry.

18051-18052 **LANDSCAPE AND TURFGRASS MANAGEMENT** (2 years) (grades 11 & 12) A=4

(Completion of this course meets one of the two computer science credits required for graduation).

This two year course provides instruction in the five areas of Horticulture studies. First year students receive entry-level instruction in the following areas: Landscape Maintenance and Design, Green House and Nursery Management, Turfgrass, Horticutlural Mechanics and Fertilizer and Pesticide Certification. Second Year students are provided with the opportunities to do advanced studies in these areas.

17101-17102 **ELECTRICAL OCCUPATIONS** (2 years) (grades 11 & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

The Electrical Occupations course includes training in layout, assembly, installation, and testing of wiring and devices used in heating, lighting, power, motor control and other electrical systems at residences, factories, commercial, and other buildings. Classroom work includes electrical theory, diagram and blueprint reading, estimating for electrical repair and building wiring, and electrical and occupational safety, health act code requirements. Students will work in the shop to perform house wiring, motor, and motor control projects.

14001-14002 **HEALTH OCCUPATIONS** (2 years) (grades 11 & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

The Health Occupations course introduces students to varied aspects of the Health Care profession. The first year students are introduced to basic anatomy, physiology , and medical terminology. Students spend time researching medical careers as well..

The second year of the course deals with health care information related to direct care of the sick, disabled, or infirm. The training is applicable toward certification as a Nurse's Aide. Also included is instruction in household management and preparation of special diets to assist in the care of handicapped, elderly, and infirm in their private homes. These students may be provided a clinical experience as part of their training.

13206-13207 **WELDING** (3 years) (grades 10,11 & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

Welding is the process of joining pieces of metal by applying intense heat to melt or fuse the metal with the use of an electric arc or gas flame. It is the most common method of permanently connecting various metal parts that go into the construction of automobiles , spacecraft, ships, household appliances, and steel reinforcing rods in bridges, buildings, and roads.

Students in the welding technology course will learn gas, arc, TIG, MIG, fluxcore, and pipe welding in accordance with the American Welding Society and the American standard of testing material specification, passing all-position guide bend tests. This will qualify the student as an all-position welder. The welding student will also learn blueprint reading, welder's math for fabrication, fabrication, and arc-air cutting process. Safety is stressed in all areas of welding.

19050-19051 **EARLY CHILDHOOD EDUCATION** (2 years) (grades 11 & 12) A=4
(Completion of this course meets one of the two computer science credits required for graduation).

The Crawford County Early Childhood Educatoin course is an instructional program endorsed by the Pennsylvania Department of Education to prepare individuals for a variety of occupations in child care and guidance, often under the supervision of professional personnel in child or day care centers. The course includes instruction in the child's growth and development; nutrition; program planning and management; safety and behavior guidance; play activities; child abuse and neglect; parent-child personal relationships; learning experiences for children; and laws, regulations, and policies relating to child care centers.

By successfully completing the two year program, students will have the opportunity to earn a CDA Ready Certificate (Child Development Associate). Upon graduation and if the student is 18 years of age, he/she will be eligible to take the written CDA test, participate in a CDA assessment observation, and complete an oral interview conducted by a CDA representative. When all the requirements are fulfilled, the student will earn a CDA credential.

22154 **DIVERSIFIED OCCUPATIONS (CO-OP)** (grade 12) A=4 or 5 depending on Vo-Tech course

Diversified Occupations is a planned vocational program which is offered here at the career center. The program prepares a diverse group of students for more than one vocational education area of instruction for gainful employment. The program is a direct relationship/partnership between a local business/industry and the CCCTC

Employers sign a training agreement with Crawford County CTC to supervise and train the student. Grades are based on employer evaluations of the student's work performance and weekly scheduled co-op classes at the Career Tech School. The class covers business topics including career planning, job seeking skills, job survival skills, management, taxes, social security, insurance, banking, starting a business, and safety. Students receive a certificate from Crawford County CTC.

22151 **CAPSTONE CO-OP** (grade 12) A=4 or 5 depending on Vo-Tech course

Capstone Co-Op is open to current Career Tech seniors with a job related to the occupational field in which the student is currently studying at Crawford County CTC. The student must have completed the basic skill competency training in their shop area and continue training in that field on the job. The student must be recommended by their instructor and have acceptable conduct and classroom grades. Students attend MASH for half of the day to complete academic requirements for graduation and spend the other half of the day on the job at school approved work sites.

Employers sign a training agreement with Crawford County CTC to supervise and train the student. Grades are based on employer evaluations of the student's work performance and weekly scheduled co-op classes at the Career Tech School. The class covers business topics including career planning, job seeking skills, job survival skills, management, taxes, social security, insurance, banking, starting a business, and safety. Students receive a certificate from Crawford County CTC both in their shop area and Capstone Co-Op.

CAREER PROGRAMS WHICH REQUIRE ACADEMIC MATHEMATICS

The following programs have a math requirement. Students must have completed, or in the process of taking Algebra I in order to participate in these programs. Students in these programs should be in Academic or above Academic Math each year of high school.

13201-13202-13203 **PRECISION MACHINING** (3 years) (grades 10, 11, & 12) A=5

(Completion of this course meets one of the two computer science credits required for graduation).

The precision machining curriculum is designed to provide entry Level instruction in setting up and operating industrial type machinery. A machinist is a skilled worker who, working from blueprints and written/verbal specifications, can operate all kinds of machine tools to cut, drill, grind, or otherwise shape and size material with an extremely high degree of accuracy to make the part to the print.

Machinists and toolmakers are skilled workers who provide tools and special guiding and holding devices that are used to mass-produce a variety of machined parts. Using basic manual machines, advanced CNC machine tools, and precision measuring instruments, students work with the metals and alloys commonly used in manufacturing and hold tolerances acceptable in industry.

In this course the student will develop a basic knowledge of machine operation, standard shop practices, blueprint reading, metal processes, heat treating and related mathematics. All machines and instruments are commonly used in industry. One hour of related theory will be provided for every six hours in the shop. The students practice their skills by making precision tools which they get to keep and use in their career in the maching industry.

10001-10003 **COMPUTER AND INFORMATION SCIENCE** (Computer Technology(3 years)
(grades 10, 11, & 12) A=5

(Completion of this course meets one of the two computer science credits required for graduation).

This program concentrates on studies required to achieve the 2 year and 1 year certifications. The student becomes skilled at computer maintenance and repair, and network fundamentals. The CompTIA, IT Fundamentals and A+ certifications are the industry standard for computer support technicians. These certifications prove competence in areas such as installation, preventative maintenance, networking, security and troubleshooting. Information technology, even in a tough economy, is a rapidly growing and necessary field. Students who achieve their CompTIA certifications means increased job security, additional career opportunities and increased credibility in the workplace

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21001-21002-21003 **DRAFTING AND DESIGN TECHNOLOGY/CADD** (3 years)
(grades 10, 11, & 12) A=5

(Completion of this course meets one of the two computer science credits required for graduation).

The Drafting and Design Technology/CADD class is devoted to training students for college engineering programs and the work force. This course will provide a broad and thorough knowledge of the principle methods by which draftspersons, engineers, technicians and designers in the field express ideas to the craftspersons who fabricate the item used in everyday life. Work in this course will give the student an opportunity to develop the necessary technical skills in the use of 2D CADD software, 3D solid modeling, and 3D printing used to produce electonic files and rapid prototypes. Emphasis is placed upon acquiring the necessary technical knowledge to be able to orally, graphically, mathematically, and scientifically translate the idea of the engineer, technician, and tradesperson into a practical graphic language. The course stresses the relationship between theory and practice through the application of principles that provide entry level skills and "hands-on" experiences on computer aided drafting systems. Areas of specialization include mechanical, architectural, and civil drafting as well as technical illustration.

17105 -17106- 17107 **ELECTRONIC TECHNOLOGY** (3 years) (grades 10, 11, & 12) A=5

(Completion of this course meets one of the two computer science credits required for graduation).

The Electronics Technology Course is designed to give students a working knowledge of Basic Electricity, Analog, and Digital Electronics along with some basics in Communications. The knowledge acquired will allow a student to obtain some entry level positions in the field of Electronics or related degree program after high school.

Today, graduates of this program may be found working in such specialty fields as Broadcasting, Aviation Electronics, Computers, Telecommunications, Medical Equipment Design and Maintenance, Industrial Process Control, and more.

Starting salaries of qualified Electronics Technology graduates are often above that of many students graduating from other degree programs.

NCAA APPROVED COURSES

ENGLISH

CREATIVE WRITING
PUBLIC SPEAKING
INTRO TO JOURNALISM
MYTHOLOGY
ACADEMIC ENGLISH 9
ACADEMIC ENGLISH 10
ACADEMIC ENGLISH 11
ACADEMIC ENGLISH 12
ACCEL ENGLISH 9
ACCEL ENGLISH 10
ACCEL ENGLISH 11
ACCEL ENGLISH 12
AP ENGLISH LITERATURE AND COMPOSITION

SOCIAL STUDIES

19TH CENTURY US HISTORY - ACCEL
19TH CENTURY US HISTORY-ACADEMIC
20TH CENTURY WORLD HISTORY -ACADEMIC
AP UNITED STATES HISTORY
CIVICS AND GOVERNMENT - ACADEMIC
CIVICS AND GOVERNMENT - ACCEL
CONTEMPORARY SOCIAL SCIENCE
AP EUROPEAN HISTORY
WORLD GOVERNMENT AND ECONOMICS

MATH

GEOMETRY - ACADEMIC	
GEOMETRY - ACCEL	
SELECT TOPICS- 11	
PRACTICAL ALGEBRA- A 9	0.5
PRACTICAL ALGEBRA-B 10-11	0.5
ALGEBRA I – ACADEMIC	
ALGEBRA II – ACCEL 9	
ALGEBRA II – ACADEMIC 9	
ALGEBRA II – ACADEMIC 10-12	
INTRO TO TRIGONOMETRY W/ REV. OF ALGEBRA II	
PRE-CALCULUS - ACADEMIC	
AP STATISTICS	
ELEMENTARY FUNCTIONS	
ACADEMIC CALCULUS	
AP CALCULUS AB	

LANGUAGES

FRENCH I
FRENCH II
FRENCH III
FRENCH IV
FRENCH V
SPANISH I
SPANISH II
SPANISH III
SPANISH IV
SPANISH V
GERMAN I
GERMAN II
GERMAN III
GERMAN IV
GERMAN V

Both Practical Algebra A, Practical Algebra B are worth .5 credits each towards NCAA requirements

SCIENCE

ACADEMIC BIOLOGY 9-10	X
HONORS BIOLOGY 9-10	X
SENIOR BIOLOGY	X
AP BIOLOGY 12	X
ACADEMIC CHEMISTRY 11-12	X
HONORS CHEMISTRY 10-12	X
AP CHEMISTRY 11-12	X
ASTRONOMY 11-12	
ACADEMIC PHYSICS 11-12	X
AP PHYSICS I 11-12	X
AP PHYSICS II 12	X
ADVANCED CHEMISTRY II 11-12	X

X indicates that the course is credited as a laboratory course