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Curriculum Guide

2005 - 2006 School Year

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Iroquois Senior High School

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Mission Statement

*In partnership with family and community,
the goal of Iroquois High School,
a small school with big pride,
is to prepare students for lifelong change,
to mold responsible citizens and
to provide an inviting and safe environment
which will foster curiosity, creativity and
the intellectual and social growth of each student.*

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INTRODUCTION

This curriculum guide serves as a reference to courses available for selection by students, grades 9 through 12, in the Iroquois Senior High School. It represents a resource of information pertinent to each course and to specific individual interests, desires or needs.

In planning one's secondary years, it is important to seek the guidance and help of subject teachers, school counselors and administrators. This guide contains academic/college preparatory curriculum requirements along with Iroquois graduation requirements. This curriculum guide and the involvement of your parents and members of the Iroquois staff will help you in making wise choices.

Your future depends upon the choices that you make now and upon those made periodically as you progress from one grade to the next. We encourage you to familiarize yourself with the contents of this curriculum guide and to use it wisely.

GENERAL INFORMATION

The following materials are intended to provide helpful guidance to both students and parents. The information, when combined with assistance from counselors, will enable students to plan their program of study.

In selecting courses of study, each student should consider:

- (1) the graduation requirements of Iroquois High School,
- (2) the courses that will meet the student's future vocational and/or education goals, and
- (3) the student's ability.

SCHEDULING REQUIREMENTS

Iroquois has an intensive block schedule day. All students are to carry eight (8) one-credit courses or their equivalent in an academic year. Each student will carry four (4) one-credit courses or their equivalent per semester. Students failing a required subject should include it on their course selection for the following year or make plans to take it in an approved summer school. All students are encouraged to schedule as many courses as possible to enrich their program of study.

ACADEMIC OR COLLEGE PREPARATORY CURRICULUM

Since the student who is preparing for college admission is faced with a wide variety of admission requirements, it is wise to prepare as fully as possible.

Students should become aware of these varying entrance requirements early and plan accordingly. Basically, the minimum college admission requirements consist of:

English.....	4 Credits
Social Studies.....	3 Credits
Academic Math.....	3 Credits
Science.....	3 Credits
Foreign Language.....	2 Credits
General Electives.....	As many as possible

The academic mathematics requirements normally should be met with Algebra I College Prep, Algebra II College Prep, Geometry College Prep or Pre-Calculus; students in the math honors program will take Algebra I College Prep, Algebra II College Prep, Algebra III College Prep, Geometry College Prep, Pre-Calculus and Calculus.

The academic science requirements normally should be met with Physical Science, Biology, Chemistry and Physics; students in the science honors program will take Biology College Prep, Chemistry I Honors, Physics I Honors, Physics II Honors and Biology II/Chemistry II Honors.

When only two years of a language are submitted for admission, both years are expected to be in the same language.

Social Studies requirements are World History, American History and American Government.

IROQUOIS GRADUATION REQUIREMENTS

English	1 credit is required per year in Grades 9-12. Additional Language Arts electives are available.	4.00 Credits
Social Studies	4 sequential courses are required in Grades 9-12. Additional electives are available.	4.00 Credits
Science	4 science credits are required in Grades 9-12. Additional electives are available.	4.00 Credits
Math	3 sequential courses and an elective are required in Grades 9-12. Additional electives are available.	4.00 Credits
Arts & Humanities	2 credits are required in Grades 9-12. Additional electives are available.	2.00 Credits
Technology	3 credits are required in Grades 9-12. Additional electives are available.	3.00 Credits
Health and Physical Education	2.50 credits are required in Grades 9-12. Additional electives are available.	2.50 Credits
Elective	2.50 credits are required in Grades 9-12.	<u>2.50</u> Credits
Total Credits Required for Graduation		<u>26.00</u> Credits

Students must successfully complete Graduation Project Portfolios in order to be issued a diploma.

*Students must meet every requirement in order to participate
in the Commencement Exercises.*

PROGRAM OF STUDIES

ART

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2601	Fundamentals of Art	9-10-11-12	0.50	5 or A/B	9 or 18
2602	Drawing and Painting	10-11-12	1.00	5	18
2602Q	Drawing	9	0.50	5	9
2604	T Printmaking/B&W Photo.	10-11-12	1.00	5	18
2605	Ceramics	9-10-11-12	0.50	5 or A/B	9 or 18
2607	T Computer Graphics	10-11-12	0.50	5	9
2608	Studio Art	11-12	0.50	5 or A/B	9 or 18
2609	Sculpture	10-11-12	0.50	5 or A/B	9 or 18
2611	Art History	10-11-12	0.50	5	9

BUSINESS

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2730	T Document Processing	9-10-11-12	0.50	5	9
2732	T Web/Digital Design	10-11-12	0.50	5	9
2733	T Computer Applications I	9-10-11-12	1.00	5	18
2734	T Computer Applications II	9-10-11-12	1.00	5	18
2735	T Accounting I	10-11-12	1.00	5	18
2736	Accounting II	11-12	1.00	5	18
2737	Personal Finance	11-12	0.50	5	9
2860	Career Exploration	9-10	0.50	5 or A/B	9 or 18

ENGLISH

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2101	English 9	9	1.00	5	18
2102	English 9 Honors	9	1.00	5	18
2104	English 10	10	1.00	5	18
2105	English 10 College Prep	10	1.00	5	18
2106	English 10 Honors	10	1.00	5	18
2108	English 11	11	1.00	5	18
2109	English 11 College Prep	11	1.00	5	18
2110	English 11 Honors	11	1.00	5	18
2112	English 12	12	1.00	5	18
2113	English 12 College Prep	12	1.00	5	18
2114	English 12 Honors	12	1.00	5	18

FAMILY & CONSUMER SCIENCES

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2760	T Family & Consumer Science (Comprehensive)	9	1.00	5	18
2761	T Foods & Nutrition I	10-11-12	1.00	5	18
2762	T Foods & Nutrition II	11-12	1.00	5	18
2764	T Child Development	10-11-12	1.00	5	18

FOREIGN LANGUAGE

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2501	French I	9-10-11-12	1.00	5	18
2502	French II	10-11-12	1.00	5	18
2503	French III	11-12	1.00	5	18
2504	French IV	12	1.00	5	18
2506	Spanish I	9-10-11-12	1.00	5	18
2507	Spanish II	10-11-12	1.00	5	18
2508	Spanish III	11-12	1.00	5	18
2509	Spanish IV	12	1.00	5	18

GENERAL ELECTIVES

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2116	T Journalism I	10-11-12	1.00	5	18
2117	T Journalism II	10-11-12	1.00	5	18
2118	T Journalism III	11-12	1.00	5	18
2119	T Journalism IV	12	1.00	5	18
2120	Speech	9-10-11-12	0.50	5	9
2135	SAT Preparation	10-11-12	0.50	5	9
2142	Creative Writing	10-11-12	0.50	5	9
2150	Academic Sports League	9-10-11-12	0.50	-	18
2850	T Yearbook I	9-10-11-12	1.00	5	18
2851	T Yearbook II	11-12	1.00	5	18

HEALTH/PHYSICAL EDUCATION

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2801	Physical Education-Aquatics	9-10	0.50	5 or A/B	9 or 18
2803	Physical Education 11/12	11-12	0.50	5 or A/B	9 or 18
2807	Health	11	0.50	5 or A/B	9 or 18
2808	Health Elective	12	1.00	5	18

MATHEMATICS

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2301	Intro to Algebra - Part 1	9-10	1.00	5	18
2302	Intro to Algebra - Part 2	10-11	1.00	5	18
2304	Algebra I College Prep	9-10	1.00	5	18
2305	Algebra II College Prep	9-10-11-12	1.00	5	18
2306	Geometry College Prep	9-10-11-12	1.00	5	18
2307	Informal Geometry	10-11-12	1.00	5	18
2308	Pre-Calculus	10-11-12	1.00	5	18
2309	Calculus	11-12	1.00	5	18
2311	Consumer Mathematics	11-12	1.00	5	18
2312	Algebra III College Prep	10-11-12	1.00	5	18

MUSIC

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2649	Music of Broadway	9-10-11-12	0.50	5	9
2650	Winter Holiday Music	9-10-11-12	0.50	5	9
2651	Oldies Music	9-10-11-12	0.50	5	9
2652	Spring Concert	9-10-11-12	0.50	5	9
2653	T Show Choir (Audition Req.)	9-10-11-12	1.00	A or B	36
2654	T Marching/Concert Band	9-10-11-12	1.00	A or B	36
2659	Stage Band	9-10-11-12	0.50	A or B	18
2663	Fundamentals of Acting	9-10-11-12	0.50	5 or A/B	9 or 18

SCIENCE

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2401	Physical Science 9	9	1.00	5	18
2403	Biology I	10	1.00	5	18
2404	Biology I College Prep	9-10	1.00	5	18
2407	Chemistry I	10-11-12	1.00	5	18
2409	Chemistry I Honors	10-11-12	1.00	5	18
2411	Physics I Honors	11-12	1.00	5	18
2412	T Physics I	11-12	1.00	5	18
2413	T Physics II Honors	12	1.00	5	18
2416	T General Science	11-12	1.00	5	18
2417	T Bio. II/Chem. II Honors	11-12	1.00	5	18
2419	Environmental Science	11-12	1.00	5	18

Note: Students are required to take Physical Science 9, Biology, Chemistry and Physics (General Science can be used to meet the Physics requirement).

SOCIAL STUDIES

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2202	Geography & Economics	9	1.00	5	18
2204	World History II	10	1.00	5	18
2205	World History II Honors	10	1.00	5	18
2207	American History II	11	1.00	5	18
2208	American History II Honors	11-12	1.00	5	18
2213	Psych. of Human Behavior	11-12	1.00	5	18
2214	American Government Honors	12	1.00	5	18
2215	American Government	12	1.00	5	18
2853	Community Service	10-11-12	0.50	5	9

Note: Students are required to take Geography & Economics, World History II, American History II and American Government.

TECHNOLOGY EDUCATION

<u>Course No.</u>	<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
2701	T Activities in Technology	9	0.50	5 or A/B	18
2703	T Wood Technology I	10-11-12	1.00	5	18
2704	T Wood Technology II	11-12	1.00	5	18
2710	T Architectural Drafting	11-12	1.00	5	18
2711	T CADD I	9-10-11-12	1.00	5	18
2712	T CADD II	10-11-12	1.00	5	18
2713	T CADD III	11-12	1.00	5	18
2714	T CADD IV	12	1.00	5	18

VOCATIONAL COURSES

Erie County Vocational Technical School (ECTS)

<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
T Auto Body	10-11-12	4.00	5	36
T Automotive Technologies	10-11-12	4.00	5	36
T Child Care	10-11-12	4.00	5	36
T Commercial Art	10-11-12	4.00	5	36
T Computer Information Sys.	10-11-12	4.00	5	36
T Construction Trades	10-11-12	4.00	5	36
T Cosmetology	10-11-12	4.00	5	36
T Culinary Arts	10-11-12	4.00	5	36
T Drafting & Design	10-11-12	4.00	5	36
T Electrical Engineering	10-11-12	4.00	5	36
T Electronics	10-11-12	4.00	5	36
T Facility Engineering	10-11-12	4.00	5	36
T Graphic Communications	10-11-12	4.00	5	36
T Health Assistant	10-11-12	4.00	5	36
T Metal Fabrication	10-11-12	4.00	5	36
T Plastics Technology	10-11-12	4.00	5	36
T Tool & Die	10-11-12	4.00	5	36

Seniors Only

<u>Subject</u>	<u>Grade</u>	<u>Credit</u>	<u>Periods/Days</u>	<u>Weeks</u>
T Networking Technologies	12	4.00	5	36
T Plastics Technology	12	4.00	5	36
T Tourism & Hospitality Mgmt.	12	4.00	5	36

^T Course can be used to partially satisfy technology required for graduation.

COURSE DESCRIPTIONS

ART

2601 Fundamentals of Art

Credit: 0.50

Grades 9-12

Fundamentals of Art is the prerequisite for all elective art classes. Fundamentals of Art is an extension and reinforcement of knowledge and skills introduced in General Art 8. A variety of media and techniques are explored through an introduction to drawing, painting and basic design. Art history will be introduced by a project-based approach. The goal of the course is to lay a strong basic foundation inherent to all advanced art electives. A sketchbook is required.

Prerequisite: Instructor Recommendation and General Art 8

2602 Drawing and Painting

Credit: 1.00

Grades 10-12

Drawing and Painting is a semester long sequential approach to the study of drawing and painting techniques and media. In Drawing, students will develop skills by creating advanced projects with graphite, ink, colored pencil and pastel. Students will be drawing from observation and themes will include still life and the figure. In Painting, students will explore projects in watercolor, acrylic and oil paint. Themes will be taken directly from painting styles in art history. Students will be expected to research on the internet. A sketchbook is required.

Prerequisite: Fundamentals of Art

2602Q Drawing

Credit: 0.50

Grade 9

Drawing is a 9-week course in which drawing techniques using graphite, charcoal, colored pencil and pastel may be explored. Students will focus on drawing from observation and apply themes and style to their work. Subjects may include still life and the figure. A sketchbook is required.

Prerequisite: Fundamentals of Art

2604 Printmaking and Black & White Photography ^T

Credit: 1.00

Grades 10-12

Printmaking and Black & White Photography is a semester long approach to the study of printmaking and black and white photography techniques and media. In Printmaking, students will learn techniques of intaglio, serigraphy and relief printing. In Black & White Photography, students will learn the basics of taking and composing black and white photographs, use the 35 mm camera controls, lighting, developing negatives and printing photographs. Students are encouraged to provide their own 35 mm camera and take photos outside the classroom. A sketchbook is required. The Black & White Photography component of this course satisfies 0.50 credit for technology requirements.

Prerequisite: Fundamentals of Art

2605 Ceramics

Credit: 0.50

Grades 9-12

Ceramics is a 9-week intensive study and exploration of clay and glazing techniques. Procedures examined will be hand building techniques using slab, coil and pinch methods, throwing on the potter's wheel, glazing and the function of the kiln. Art history will be introduced by a project-based approach. A sketchbook is required.

Prerequisite: Fundamentals of Art

2607 Computer Graphics ^T

Credit: 0.50

Grades 10-12

Computer Graphics is a nine-week introductory course on the use of the computer to manipulate and layout designs, images, typography and graphics. Some projects include image manipulation, logo, letterhead and web page design. Students will explore the use of Claris Home Page and Adobe Photoshop. Students will become familiar with the use of the digital camera and scanner.

Prerequisite: Fundamentals of Art

2608 Studio Art (Independent Study)

Credit: 0.50

Grades 11-12

Studio Art is an independent study which can be a nine or eighteen week course. The purpose is to allow a junior or senior student who has instructor recommendation and has completed Fundamentals of Art to specialize in an art area of his/her choice. The student should have a minimum grade of a "B" in previously taken art electives. Areas of choice include: studio problems in drawing, painting, sculpture, ceramics, photography, graphic design and printmaking. All projects must have instructor recommendation. The goal of the course is to allow advanced students the opportunity to become more skilled in the process of designing creative problems and the decision-making required to solve those problems. Art history will be introduced by a project-based approach. A sketchbook is required.

Prerequisite: Instructor Recommendation and Fundamentals of Art

2609 Sculpture

Credit: 0.50

Grades 10-12

Sculpture is a 9-week course in which students will explore three-dimensional design techniques using media such as paper, wire, plaster of paris and foam construction. The course will provide basic vocabulary, materials, techniques and skills in sculpture. Art history will be introduced by a project-based approach. A sketchbook is required.

Prerequisite: Fundamentals of Art

2611 Art History

Credit: 0.50

Grades 10-12

Art History is a nine-week course of study providing a condensed version of the history of art from the cave paintings to 20th century artists. The goal of the course is to provide an essential artistic vocabulary along with an understanding and appreciation of artistic styles and periods that address the State Standards in the Arts and Humanities. Possible field trips to area museums.

Prerequisite: Fundamentals of Art

BUSINESS

2730 Document Processing T

Credit: 0.50

Grades 9-12

Document Processing deals with the development of a working knowledge of the computer which includes learning the keyboard by the touch system. Special emphasis is placed on personal business letters, reports, rough drafts, tabulations and manuscript typing including a section on employment documents. Course is designed specifically for the non-business and college-bound student.

2732 Web/Digital Design T

Grades 10-12

Credit: 0.50

Web/Digital Design is a nine-week course that will cover web page design using Macromedia Dreamweaver, Flash, Fireworks and Freehand 1.0. The topics covered will include graphics, page design, websites, drawing, movies and animation. Students will be expected to develop a website and various multimedia projects such as a web photo album, an electronic portfolio, digital autobiography and create iMovies.

Prerequisite: Grade 8 Word Processing or Computer Applications I

2733 Computer Applications I T

Credit: 1.00

Grades 9-12

This course will help students develop an understanding of the concepts and applications for the personal computer. Students will work with word processing, spreadsheet, database, paint, draw, desktop publishing, slide shows and communications with the internet.

Prerequisite: Grade 8 Word Processing or Document Processing

2734 Computer Applications II T

Credit: 1.00

Grades 9-12

This course will explore more in depth word processing, desktop publishing, spreadsheet, database, drawing, painting, power point, the internet, creating a web page and using iMovies. Final course objective: students will be able to create and demonstrate a multi-media project integrating the above software applications.

Prerequisite: Computer Applications I

2735 Accounting I T

Credit: 1.00

Grades 10-12

Accounting I introduces the concept of double-entry accounting using both manual accounting and computerized accounting methods. The program covers the complete accounting cycle for a sole proprietorship, a partnership and the beginnings of a corporation. It also teaches the preparation of reports, the special journals and certain specific problems related to all types of business.

Prerequisite: Math with a Minimum Grade of C

2736 Accounting II

Credit: 1.00

Grades 11-12

Accounting II concerns itself with the problems applicable to business as found in our economy. It permits the students to learn to handle the records of individual proprietorships, of partnerships and of corporations. It concentrates more on record interpretation than beginning accounting and gives the student an opportunity to study up-to-date methods of accounting.

Prerequisite: Accounting I with a Minimum Grade of C

2737 Personal Finance

Credit: 0.50

Grades 11-12

Personal Finance covers issues and situations consumers face in today's world. The latest information on banking, taxes, savings, budgeting, credit, insurance, consumer rights and responsibilities, investing and much more will be covered. These are topics which all students should be exposed to before graduation from high school.

2860 Career Exploration

Credit: 0.50

Grades 9-10

In Career Exploration, students will have the opportunity to explore various career clusters. Students will learn to evaluate occupational trends, identify their personal abilities and skills and develop occupational goals necessary to attain career satisfaction. They will learn about job markets including working conditions, training required, personal characteristics necessary to succeed on the job, and the future job outlook.

ENGLISH

2101 English 9

Credit: 1.00

Grade 9

English 9 is a *fundamentals of writing* course aligned to the Pennsylvania Academic Standards. It is designed to include the writing of various forms and functions of narrative, informational and persuasive compositions. Students will improve the effectiveness of their writing by studying focus, organization, content, style and conventions. Students' work will then be showcased in a portfolio. Romeo and Juliet by Shakespeare and The Odyssey by Homer will be studied in a reading-writing workshop approach.

2102 English 9 Honors

Credit: 1.00 (Weighted Grade)

Grade 9

English 9 Honors is a more advanced writing course aligned to the Pennsylvania Academic Standards including the various forms and functions of narrative, informational and persuasive compositions aligned to the Pennsylvania Academic Standards. Much of the student writing involves critical essays written in response to class seminars. This includes Great Expectations by Charles Dickens and The Merchant of Venice by William Shakespeare in addition to a more in-depth study of Romeo and Juliet by William Shakespeare and The Odyssey by Homer. Students read, discuss, interpret and write at a much faster pace. An advanced vocabulary program is part of the course. Students' work will be showcased in a portfolio.

Prerequisite: Instructor Recommendation

2104 English 10

Credit: 1.00

Grade 10

This course is designed to further enhance the students' writing skills, as well as give them opportunities to apply those skills based on the literature covered in class and writing prompts. In addition, the study of vocabulary, mechanics and usage will be incorporated into the readings that will be covered including poetry, the novel and short stories. The purpose of this course is to prepare students to handle communication skills in the world today. All of the objectives in the course are geared to the reading, writing, speaking and listening section of the Pennsylvania Academic Standards.

Prerequisite: English 9

2105 English 10 College Prep

Credit: 1.00

Grade 10

The students in this course will build on and apply essay writing skills to narrative, informative and persuasive essays. These skills will also be applied to analyzing novels such as Animal Farm and Of Mice and Men, as well as the dramas The Tragedy of Julius Caesar and The Diary of Anne Frank. A 20 short story project is included that requires a summary of story lines, interviewing characters and rewriting story endings. Research skills will be introduced and applied to Animal Farm/Diary of Anne Frank dealing with the events occurring during World War I through World War II. Poetry techniques will be introduced and poems will be analyzed for those techniques. Grammar and mechanics will be reviewed and applied through each vocabulary unit. All of the objectives in the course are geared to the reading, writing, speaking and listening section of the Pennsylvania Academic Standards.

Prerequisite: English 9

2106 English 10 Honors

Credit: 1.00 (Weighted Grade)

Grade 10

Advanced writing skills acquired in previous honors courses will be applied to persuasive, narrative and informative writing prompts. Students will also write critical response essays for novels such as A Tale of Two Cities, Animal Farm, Fahrenheit 451, Of Mice and Men, two novels for independent reading, and The Diary of Anne Frank. A critical essay dealing with the political aspects of The Tragedy of Julius Caesar will also be required. The course also includes a 25 short story project in which literary criticisms, research on the author, and application of elements of short stories are required. Critical analysis will be applied to different styles of poetry including dramatic, narrative, free verse and sonnets. Students will be expected to create web generated projects such as speeches and graphing of information as it applies to Animal Farm, The Tragedy of Julius Caesar, A Tale of Two Cities and Fahrenheit 451. Research skills will further be applied to the career paper required for the class. Grammar and mechanics are reviewed on an as-needed basis. All of the objectives in the course are geared to the reading, writing, speaking and listening section of the Pennsylvania Academic Standards.

Prerequisite: English 9 Honors or Instructor Recommendation

2108 English 11

Credit: 1.00

Grade 11

English 11 is designed to prepare students with basic reading and writing skills to enter the job market, the armed services or a technical or two-year school with competence in reading, writing and speaking. The curriculum is aligned with the Pennsylvania Academic Standards which focus on the improvement of reading independently and critically; reading, analyzing and interpreting literature; writing narrative, persuasive and informative pieces including the research paper; and public speaking in both formal and informal situations. All genres of American writing will be studied including The Adventures of Huckleberry Finn, The Catcher in the Rye, The Crucible, and selected fiction, non-fiction and poetry from The American Experience.

Prerequisite: English 10

2109 English 11 College Prep**Credit: 1.00****Grade 11**

English 11 College Prep is designed to prepare those students who plan to attend college for the writing and reading requirements they will encounter. Areas of preparation include reading, writing, speaking and listening as aligned with the reading, writing, speaking and listening Pennsylvania Academic Standards. The reading selections include American works of note including fiction and non-fiction, poetry and drama. Vocabulary for the SAT as well as formal vocabulary lessons and words from the literature studied is emphasized. Writing includes narrative, persuasive and informational prompts to prepare for the PSSA as well as complex informational and persuasive pieces and a mandatory research paper. Students will learn strategies for discussion including the Paideia method and will fulfill the speaking requirement with formal presentations and speeches.

Prerequisite: English 10

2110 English 11 Honors**Credit: 1.00 (Weighted Grade)****Grade 11**

English 11 Honors is a weighted course which emphasizes the critical reading of major works in American literature. It is designed for advanced 11th grade students to acquaint them with the methodological procedures of criticism, both literary and textual. Students in this course must be capable of completing demanding work independently. Extensive reading, oral presentations, in-depth discussion and high caliber writing are skills expected. Unabridged primary texts and critical reviews are the basis for seminars and critical essays. The curriculum is aligned with the Pennsylvania Academic Standards in reading, writing, speaking and listening.

Prerequisite: English 10 Honors or Instructor Recommendation

2112 English 12**Credit: 1.00****Grade 12**

English 12 is designed for 12th grade students with basic reading and writing skills as determined by the PSSA, as well as teacher recommendation and student interest. The curriculum aligns with the reading, writing, speaking and listening Pennsylvania Academic Standards with focus on improving student achievement of the Academic Standards. This is partly a world literature survey course using a few selected works from Prentice Hall Literature, World Masterpieces and a reading and writing workshop approach to promote a lifelong interest in reading and basic competency in writing. The curriculum also includes one novel, weekly vocabulary units, several speeches and an extensive research project on a topic of choice. The purpose of this course is to prepare students to enter the world of work and to function at a competent level in reading, writing and speaking. This course is taught one semester, five times a week for 85 minutes per day. Successful completion of the course earns the student one credit toward graduation.

Prerequisite: English 11

2113 English 12 College Prep**Credit: 1.00****Grade 12**

English 12 College Prep is designed for 12th grade students with proficient reading and writing skills as determined by the PSSA, as well as teacher recommendation and student interest. The curriculum aligns with the reading, writing, speaking and listening Pennsylvania Academic Standards on a 12th grade level. This is a world literature survey course using works from Prentice Hall Literature, World Masterpieces as the primary textbook. The curriculum also includes Brave New World and Macbeth. After in-depth seminars analyzing selected works for their literary devices, elements and impact on society, students write three to five page critical analysis papers on the major works studied. Students also write a six to ten page research paper on a topic of choice. The purpose of this course is to prepare those students who plan to attend college for the writing and reading requirements they will encounter. This course is taught one semester, five times a week for 85 minutes per day. Successful completion of the course earns the student one credit toward graduation.

Prerequisite: English 11

2114 English 12 Honors**Credit: 1.00 (Weighted Grade)****Grade 12**

English 12 Honors is designed for 12th grade students with advanced reading and writing skills as determined by the PSSA and the Stanford Achievement Test, teacher recommendation and student interest. The curriculum aligns with the reading, writing, speaking and listening Pennsylvania Academic Standards on a post-secondary level. Unabridged primary texts and critical reviews are the basis for in-depth discussion and written assignments. The curriculum includes seven novels, Pride and Prejudice, Brave New World, Lord of the Flies, Frankenstein, The Stranger, Siddhartha and Wuthering Heights; seven plays, Hamlet, Macbeth, Oedipus Rex Oedipus at Colonus, Antigone, Waiting for Godot and The Importance of Being Earnest; and a collection of poems from Norton's Anthology. After in-depth seminars analyzing the work for its literary devices, elements and impact on society, students write a three to six page critical analysis paper for each of the texts studied, one major technology-based literary research project and a myriad of activities ranging from memorization of lines to projects. Students also write an eight to fifteen page research paper on a topic of choice. This weighted course is taught one semester, five times a week for 85 minutes per day. Successful completion of the course earns the student one credit toward graduation.

Prerequisite: English 11 Honors or Instructor Recommendation

FAMILY & CONSUMER SCIENCES**2760 Family & Consumer Sciences (Comprehensive) ^T****Credit: 1.00****Grade 9**

This comprehensive course for 9th grade students includes a full introduction to the overall Family & Consumer Science curriculum which encompasses far more than foods and sewing construction programs. Areas such as consumer education, interior decorating, child care and development and personal care are explored.

2761 Foods & Nutrition I ^T

Credit: 1.00

Grades 10-12

Students prepare food items according to various units of study. Students work in small groups and then sample and evaluate their products. Proper nutrition, good meal planning and careful food buying habits are stressed.

2762 Foods & Nutrition II ^T

Credit: 1.00

Grades 11-12

Students are involved with more complex food preparation. There is extensive student participation in recipe selection and experimental foods work. Correct etiquette and social behavior, as well as the art of attractive and nutritious food serving is stressed.

Prerequisite: Instructor Recommendation and Foods I

2764 Child Development ^T

Grades 10-12

Credit: 1.00

A complete background of child development from birth until school age is included. Practical experience is gained through working with preschool children in a school environment. Child psychology and methods of parenting are studied. An infant simulator is required to be used by each student.

FOREIGN LANGUAGES

2501 French I

Credit: 1.00

Grades 9-12

French I teaches oral proficiency using mainly the present tense. Students will be able to conjugate verbs, utilize various grammar structures and build a working vocabulary. Listening skills and reading skills are also developed. Some cultural similarities and differences among the United States, Canada and France are also emphasized to enhance student appreciation for other cultures (literature, food, holidays, customs, etc.). Students will converse at a minimum level of proficiency.

2502 French II

Credit: 1.00

Grades 10-12

French II is a continuation of French I. Reading, grammar, listening and vocabulary become more challenging at this level. Cultural lessons are interspersed throughout the various lessons. Students begin to move from a minimum level to an intermediate level of oral proficiency.

Prerequisite: French I with a Minimum Grade of C

2503 French III

Credit: 1.00

Grades 11-12

French III is a continuation of French I and II. Additionally, vocabulary and grammar structures are introduced, as well as polishing of previously learned concepts. Students will read plays, short stories, poems and essays to synthesize previously learned material. Oral proficiency should be at an intermediate level.

Prerequisite: French II with a Minimum Grade of C

2504 French IV

Credit: 1.00

Grade 12

French IV is the continuation and completion of the previous courses in French. Oral proficiency, listening skills, grammar structures and vocabulary terms are taught at an intermediate to advanced level.

Prerequisite: French III with a Minimum Grade of C

2506 Spanish I

Credit: 1.00

Grades 9-12

Spanish I teaches oral proficiency using mainly the present tense. Students will be able to conjugate verbs, utilize various grammar structures and build a working vocabulary. Listening skills and reading skills are also developed. Some cultural similarities and differences among the United States, Latin America and Spain are also emphasized to enhance student appreciation for other cultures (literature, food, holidays, customs, etc.). Students will converse at a minimum level of proficiency. Students will work towards the Pennsylvania Academic Standards for foreign language: communication, culture and community.

2507 Spanish II

Credit: 1.00

Grades 10-12

Spanish II is a continuation of Spanish I. Reading, grammar, listening and vocabulary become more challenging at this level. Cultural lessons are interspersed throughout the various lessons. Students begin to move from a minimum level to an intermediate level of oral proficiency.

Prerequisite: Spanish I with a Minimum Grade of C

2508 Spanish III

Credit: 1.00

Grades 11-12

Spanish III is a continuation of Spanish I and II. Additionally, vocabulary and grammar structures are introduced, as well as polishing of previously learned concepts. Students will read plays, short stories, poems and essays to synthesize previously learned material. Oral proficiency should be at an intermediate level.

Prerequisite: Spanish II with a Minimum Grade of C

2509 Spanish IV

Credit: 1.00

Grade 12

Spanish IV is the continuation and completion of the previous courses in Spanish. Oral proficiency, listening skills, grammar structures and vocabulary terms are taught at an intermediate to advanced level.

Prerequisite: Spanish III with a Minimum Grade of C

GENERAL ELECTIVES

2116 Journalism I T

2117 Journalism II T

2118 Journalism III T

2119 Journalism IV T

Credit: 1.00 Per Course

Grade 10-12

Journalism is open to students in Grades 10, 11 or 12 with instructor recommendation. Students study the basics of journalism writing in both print journalism and broadcasting. The students also contribute to the newspaper, the Smoke Signal, and to the television broadcasts which the class produces. Each additional year of the course, the students continue to work on the production of the paper and the broadcasts.

Prerequisite: Instructor Recommendation

2120 Speech

Credit: 0.50

Grades 9-12

Speech 9-12 is an elective course designed for students who wish to improve their communication and public speaking skills. The areas covered include listening, speaking and research as aligned with the reading, writing, speaking and listening Pennsylvania Academic Standards 1.6 and 1.8. The primary focus is on effective listening and speaking, with special emphasis on successful delivery techniques. Several speeches place emphasis on research skills such as the location, organization and acknowledgment of sources. Five types of these speeches are mandatory (introduction, informational, persuasive, demonstration and personal experience), and students may select from a list of optional types of speeches for the five remaining. This nine-week course is taught five times a week for 85 minutes per day.

2135 SAT Preparation

Credit: 0.50

Grade 10-12

The SAT preparation course is an elective course for students in grades 10, 11 and 12. It is designed to prepare students in the areas of reading comprehension, sentence completions, writing skills and mathematics. This course will also encompass the areas of ACT including but not limited to English grammar and punctuation, reading comprehension, mathematical applications, and science reasoning.

2142 Creative Writing

Credit: 0.50

Grades 10-12

This course is designed to teach students to read and analyze various verse models and then create their own poems patterned after these models. Students will also analyze strategies of effective prose writing, read various prose forms and then write their own prose. At the completion of the course, students will publish their own creations in a literary magazine

2150 Academic Sports League (ASL)

Grades 9-12

Credit: 0.50

The Academic Sports League (ASL) is a course designed to promote academic excellence through teamwork among students of all achievement levels. Students will study selected topics in language and literature, art, music, mathematics, science, economics and social science. In addition, students will practice effective public speaking, interview strategies and essay writing. Students study the areas of content supplied by the United States Decathlon and then compete as a team against other area schools. Students are expected to attend competitions. Students can join this class during their last quarter of 8th grade to prepare for the fall competitions. Students in grades 9 through 12 not enrolled in the course may also participate in the competitions by meeting the criteria set by the instructors.

2850 *Yearbook I T

Credit: 1.00

Grades 9-12

Yearbook I is designed to give students the opportunity to prepare and produce a high quality yearbook. Students will learn the basics of yearbook production. Topics will include: theme, layout design, writing copy, taking photos and meeting a budget. Students in Yearbook I will be required to: (1) contribute to the completion of layouts; (2) take photos used in the yearbook; (3) meet fundraising goals.

Prerequisite: Instructor Recommendation, Special Arrangement

2851 *Yearbook II T

Credit: 1.00

Grades 11-12

Yearbook II is a follow-up course to Yearbook I. Students who take Yearbook II will be given increased responsibilities and duties including: editing copy and layouts, entering copy on the computer program, choosing photos to be used for layouts and budget preparation and planning. Students will have to meet the requirements of Yearbook I plus (1) edit completed layouts and; (2) assist Yearbook I students in their work.

Prerequisite: Instructor Recommendation, Yearbook I, Special Arrangement

** In both classes, students will be REQUIRED to cover events outside of regular school time and PARTICIPATE IN YEARBOOK FUNDRAISERS.*

Note: Any course can be used as an elective after the required courses are satisfied. (Example: after four math credits, the fifth math credit can be considered an elective.)

HEALTH/PHYSICAL EDUCATION

2801 Physical Education - Aquatics 9/10

Credit: 0.50

Grade 9-10

Aquatics 9/10 physical education class is designed to provide the student with intermediate level swimming skills. Each student will be instructed in all swimming strokes, surface dives, turns, survival float, treading water, PFD use, throwing and reaching assists, rescue breathing and other safety techniques. Students will have an opportunity to learn a lifetime sport as well as be educated in necessary skills to be in and around water. Each student will have the opportunity to enhance their skills through individual and group socialization activities. Through this class, students will be able to increase their fitness level by engaging in positive cardiovascular activity. Incorporated within the physical education class will be ten periods of instruction about the relationship of lifestyles and diseases, abstinence and birth control, first aid and safety principles. All physical activities taught/participated in will be developmentally appropriate and support achievement of physical/personal fitness goals.

Note: All Grades 9 through 12 physical education classes will engage in physical activities that are developmentally appropriate and support achievement of physical/personal fitness and activity goals.

2803 Physical Education 11/12

Credit: 0.50

Grade 11-12

The grade 11/12 physical education course will continue to develop skills that have been taught in previous years. An emphasis will be placed on providing adequate opportunities to enable the student to develop and display proper team play and socialization skills. All physical activities taught/participated in will be developmentally appropriate and support achievement of physical/personal fitness goals. Additionally, within the physical education class will be a unit covering AIDS/HIV.

The curriculum will be taught on an odd-even numbered year rotation. It includes:

- | <u>Even</u> | <u>Odd</u> |
|---------------------------|---------------------|
| • soccer | • volleyball |
| • basketball | • floor hockey |
| • recreational volleyball | • softball |
| • AIDS/HIV | • AIDS/HIV |
| • physical fitness* | • physical fitness* |

* At least thirty (30) minutes of personal physical fitness will be included in each physical education class.

Note: All Grades 9 through 12 physical education classes will engage in physical activities that are developmentally appropriate and support achievement of physical/personal fitness and activity goals.

2807 Health 11

Credit: 0.50

Grade 11

The 11th grade health curriculum includes units on the following:

- mental health (stress/healthy living)
- parenting
- STDs, AIDS/HIV
- family planning (styles, choices, keys)
- heart disease
- reproduction, child birth
- prenatal care
- alcohol/drug abuse
- practical family living
- cancer
- the aging and dying process

2808 Health Elective

Credit: 1.00

Grade 12

Advanced health education is an elective course which can be taken after the required health course is successfully completed. Students are exposed to topics that they will encounter in many required college courses in various health fields.

Prerequisite: Health 11

MATH

2301 Intro to Algebra - Part I

Credit: 1.00

Grades 9-10

This course covers the topics which make up the first half of a course in Algebra I. It reviews the basic rules of mathematics and how they can be applied to solving problems and working with polynomial expressions using the set of positive real numbers. Then these same rules are applied to solving equations and inequalities when the solution set includes the complete set of real numbers.

2302 Intro to Algebra - Part 2

Credit: 1.00

Grades 10-11

This course covers the topics which make up the second half of a course in Algebra I. It begins with a general review of the basic operations as applied to solving first degree equations over the set of integers. It expands the solution of equations to include systems of linear equations, inequalities and quadratic equations.

Prerequisite: Intro to Algebra - Part 1 with a Minimum Grade of C

2304 Algebra I College Prep

Credit: 1.00

Grades 9-10

This course is a student's introduction to high school level mathematics. Successful completion of this course is a prerequisite for advancement into any higher level mathematics courses. The course includes, but is not limited to, such topics as:

- application of the four basic operations to the set of real numbers and the set of polynomial expressions
- solution and graphing of linear equations, inequalities, and systems of linear equations and inequalities
- solution of word problems and detailed study of problem solving techniques
- the use of real numbers as exponents

2305 Algebra II College Prep

Credit: 1.00

Grades 9-12

This course applies the student's previously acquired knowledge of the field postulates involving the review and extension of their abilities within the set of real numbers. The course then introduces the solution of quadratic equations using the set of complex numbers.

*Prerequisite: Algebra I College Prep with a Minimum Grade of C
Grade 8 Students by Recommendation Only*

2306 Geometry College Prep

Credit: 1.00

Grades 9-11

Geometry (a description of physical space) is the study of properties preserved by certain transformations; namely, isometrics (shape and size) and similarity transformations (shape). Geometry in a plane along with solid geometry will be covered. Spherical geometry is introduced, triangle congruence postulates are included.

Prerequisite: Algebra I College Prep and Algebra II College Prep

2307 Informal Geometry

Credit: 1.00

Grades 10-11

This course covers the study of Geometry from an applied standpoint in terms of constructions and algebraic applications. The geometry relationships of different shapes is stressed along with the use of the basic measurement of geometry.

Prerequisite: Intro to Algebra Part 1 and Part 2

2308 Pre-Calculus

Credit: 1.00

Grades 10-12

This is a course designed to prepare college bound students for the rigors of calculus. The students will summarize and review techniques of algebra, analytical geometry and trigonometry. Special emphasis is put on the trigonometry aspect of the course. Special emphasis is also placed on the topic of functions; including but not limited to circular functions and trigonometric functions. Vectors in the plane and in space, along with polar coordinates are other topics. The student will be shown how to use sequences and series which will introduce limits, the most fundamental concept needed to introduce calculus. Exploring the usage of a graphing calculator is also an indirect result of this course.

Prerequisite: Algebra I College Prep, Algebra II College Prep and Geometry College Prep with a Minimum Grade of B or Instructor Recommendation

2309 Calculus

Credit: 1.00 (Weighted Grade)

Grade 11-12

This course will expose the college bound student to the rigors of calculus and analytic geometry. The purpose is to better prepare the academic student for work encountered in pure and applied science curriculums at institutions of higher learning. Differentiation and integration are major cornerstone topics of this course; functions, relations and graphing are also discussed throughout the course. Many applications of skills to problem solving are also involved in the course work.

Prerequisite: Algebra I College Prep, Algebra II College Prep, Geometry College Prep and Pre-Calculus with a Minimum Grade of B or Instructor Recommendation (Algebra III, although not a pre-requisite, is strongly recommended)

2311 Consumer Mathematics

Credit: 1.00

Grades 11-12

This course focuses upon fundamental mathematical skills required for successful functioning in the community, in the home and on the job. The applications of these skills are related to the day-by-day problems encountered in being a member of today's society. Insurance, banking and wages are a few of the topics.

Prerequisite: Three (3) Mathematics Credits

2312 Algebra III College Prep

Credit: 1.00

Grades 10-12

This course is for students who intend to continue their education after high school in the areas of mathematics or science. It is strongly suggested for any student interested in engineering, business, technology or applied sciences. The course curriculum will include but not be limited to such topics as sequence, probability and statistics, mathematical induction, logic, vector triangles and exploring the applications of the graphing calculator.

Prerequisite: Algebra I College Prep and Algebra II College Prep with a Minimum Grade of B or Instructor Recommendation

MUSIC

2649 “Music of Broadway” Senior High Chorus

Credit: 0.50

Grades 9-12

An opportunity to sing together with emphasis on quality singing and development of choral techniques for performance. An exploration of the Music of Broadway culminating in a concert of representative selections. Class requirements: class meets five (5) times per week for a nine-week period, additional preparation time and concert participation.

2650 “Winter Holiday” Senior High Chorus

Credit: 0.50

Grades 9-12

An opportunity to sing together with emphasis on quality singing and development of choral techniques for performance. An exploration of winter holiday music, in particular, selections for Christmas. Class requirements: class meets five (5) times per week for a nine-week period, additional preparation time and concert participation.

2651 “Oldies Music” Senior High Chorus

Credit: 0.50

Grades 9-12

An opportunity to sing together with emphasis on quality singing and development of choral techniques for performance. An exploration of “Oldies” music, in particular, the popular tunes of past decades. Class requirements: class meets five (5) times per week for a nine-week period, additional preparation time and concert participation.

2652 “Spring Concert” Senior High Chorus

Credit: 0.50

Grades 9-12

An opportunity to sing together with emphasis on quality singing and development of choral techniques for performance. An exploration of a variety of stylistic differences in choral music culminating in a spring concert. Class requirements: class meets five (5) times per week for a nine-week period, additional preparation time and concert participation.

2653 Show Choir T

Credit: 1.00

Grades 9-12

An opportunity to sing and dance together in an ensemble. Emphasis is placed on quality singing and excellence in movement using contemporary tunes and music of today. Performances are scheduled throughout the year. Class meets on an intensive A/B schedule for a full year with participation by audition. Auditions will be completed prior to scheduling.

Prerequisite: Audition Required

2654 **Marching/Concert Band** **T**

Credit: 1.00

Grades 9-12

Senior High Band is a course that provides an opportunity for wind and percussion players to perform and become acquainted with the available literature for the band. Membership is open to students in Grades 9 through 12 by director approval only. Outside of school performances are a required part of this class. Four concerts are prepared each year with mandatory attendance. Outside practice is required.

2659 **Stage Band**

Credit: 0.50

Grades 9-12

Stage Band is a course designed to help the student become familiar with pertinent jazz ensemble techniques through the use of material appropriate to the student's development. Instrumentation of the standard jazz ensemble is used. Outside of school performances are a required part of this class.

2663 **Musical Theater**

Credit: 0.50

Grades 9-12

This class will provide the student with an opportunity to experience theater in a process-oriented class aimed at artistic awareness and performance skills. The techniques and strategies of basic acting will include sense awareness, improvisation, stage movement, voice and characterizations, as well as an introduction to a variety of styles and methods.

SCIENCE

2401 **Physical Science 9**

Credit: 1.00

Grade 9

A required course in the secondary school science sequence for students, unless the student has completed Life and Physical Science 8. It introduces the students to basic concepts relating to the world of physical science. The course is largely laboratory-centered with students spending approximately one-third of their time "discovering" basic physical science concepts through laboratory activities. A textbook and many audio-visual materials are used to supplement the program. Students are required to keep a notebook containing all notes and other class materials.

2403 Biology I**Credit: 1.00****Grade 10**

This Biology course is laboratory oriented and designed for students not planning on attending college after graduation. It presents students with a practical experience in biology. The course uses minimal technical terminology, emphasizing biology for a better student understanding of themselves and their relationship to their natural community. Upon completion of this course, students will be equipped to be scientifically literate consumers of biological information and environmentally responsible citizens. Students are required to keep a binder containing notes and laboratory activity sheets.

Prerequisite: Physical Science 9

2404 Biology I College Prep**Credit: 1.00****Grade 9-10**

College Preparatory Biology is designed for students of exceptional scientific ability or interest who are planning on attending college after high school graduation. It is a comprehensive course designed to provide students with an understanding of and an appreciation for the living world around them. A heavy emphasis is placed on conceptual understanding and development of a “big picture” view of how living systems are interconnected. The course is largely laboratory centered, utilizing many laboratory activities involving the study of prepared micro-slides, prepared specimens of plants and animals, as well as models and simulations of life processes. Students are required to keep a binder containing notes, laboratory activity sheets and a laboratory notebook for data collection and analysis.

Prerequisite: Instructor Recommendation

2407 Chemistry I**Credit: 1.00****Grades 10-12**

An elective, but highly recommended course in the secondary school science sequence for average students. It introduces the student to the basic concepts of chemistry - the science of atoms, molecules and materials. It is designed to meet the needs of students who expect to go to college or nursing school or for non-college bound students who are simply interested in the subject and who desire a broad-based education. It is laboratory activity centered with roughly twenty percent of class time spent on “discovering” or applying basic chemical concepts. Semi-micro laboratory equipment is utilized to save time and materials and to better teach laboratory techniques. Students are required to keep a notebook containing notes, experiments, handouts and other class materials.

Prerequisite: Biology and Algebra I or Intro to Algebra Part 2

2409 Chemistry I Honors**Credit: 1.00 (Weighted Grade)****Grades 10-12**

An elective, but highly recommended course in the secondary school science sequence for students of exceptional scientific ability and interest. It introduces the student to the basic concepts of chemistry - the science of atoms, molecules and materials. It is designed to meet the needs of students who expect to go to college or nursing school. It is laboratory activity centered with roughly twenty-five percent of class time spent on “discovering” or applying basic chemical concepts. Semi-micro laboratory equipment is utilized to save time and materials and to better teach laboratory techniques. Students are required to keep a notebook containing notes, experiments, handouts and other class materials.

Prerequisite: Instructor Recommendation, Biology College Prep, Intro to Algebra Part 2 or Algebra I College Prep

2411 Physics I Honors ^T**Credit: 1.00 (Weighted Grade)****Grades 11-12**

An elective, but highly recommended course in the secondary school science sequence for students of exceptional scientific ability or interest. It introduces students to the basic concepts of physics - the science of mechanics, light and energy. It is designed to meet the needs of students who expect to go to college or medical technology school. It is laboratory activity centered with roughly twenty-five percent of class time spent on “discovering” or applying basic physics concepts. Special audio/visuals designed to go with the course are used to show techniques and processes which can not be demonstrated “live”. Students are required to keep a notebook.

Prerequisite: Instructor Recommendation, Algebra I College Prep or Intro to Algebra Part 2

2412 Physics I ^T**Credit: 1.00****Grades 11-12**

An elective, but highly recommended course in the secondary school science sequence for average students. It introduces students to the basic concept of physics - the science of mechanics, light and energy. It is designed to meet the needs of students who expect to go to college or medical technology school or for non-college bound students who are simply interested in the subject and who desire a broad based education. It is laboratory activity centered with roughly thirty percent of class time spent on “discovering” or applying basic physics concepts. Special audio/visuals designed to go with the course are used to show techniques and processes which can not be demonstrated “live”. Students are required to keep a notebook.

Prerequisite: Instructor Recommendation

2413 Physics II Honors T

Credit: 1.00 (Weighted Grade)

Grade 12

Physics II Honors is an elective, but highly recommended course in the science sequence for students of exceptional ability or interest. It is an extension of Physics I and is designed to meet the needs of students who expect to go to college or medical technology school. The course is laboratory centered with approximately thirty-five percent of class time spent on “discovering” or applying basic physics concepts.

Prerequisite: Instructor Recommendation Biology I, Chemistry I and Physics I

2416 General Science T

Credit: 1.00

Grades 11-12

General Science is an elective course offered to students in grades 11 or 12. It is recommended for the non-college bound student or as a primer before Physics I for the college bound student. It is a laboratory and project based class which will use class discussion to help the student more easily understand the course material. Mechanics, light, electricity, magnetism and the associated technology will be explored on an almost purely conceptual basis.

2417 Biology II/Chemistry II Honors T

Credit: 1.00 (Weighted Grade)

Grades 11-12

The subject matter of organic chemistry is closer to the everyday living of people than any other branch of chemistry; its manifold discoveries affect one’s daily life in many ways. A course in organic chemistry, of the structure of matter, and of the factors which govern molecular behavior is interesting because of the beautiful logic and close relationship of organic chemistry to practical things. Biology is one of the fastest growing branches of science today. Advances such as sequencing the human genome are revolutionizing our everyday lives from the food we eat to the way we approach our health. Students in this course will explore exciting advances in biochemistry, biology, genetics and physiology with a lab focus in biotechnology and forensics.

Prerequisite: Instructor Recommendation, Biology I, Chemistry I, Physics I

2419 Environmental Science

Credit: 1.00

Grades 11-12

This course is designed to enhance the understanding of man’s relationship and influence on the environment. This is accomplished through a detailed study of plant and animal communities, habitats and populations. Other areas of emphasis include the major biomes of the earth, food chains, conservation of soil, energy and natural resources; and wise usage of land and water. The course is laboratory, project and discussion oriented with a focus on current environmental issues. Research, using resources such as the school library, visual media and the internet, will be used on a regular basis. The course and the textbook parallel the Pennsylvania Environmental Standards.

Prerequisite: A solid foundation in Biology and Physical Science

SOCIAL STUDIES

2202 Geography & Economics

Credit: 1.00

Grade 9

The geography part of this course is designed to develop and enhance the geography skills of the students. It will build on the geography skills developed in grades seven and eight. Students will work extensively with map making, building their knowledge of countries, their capitals, culture and topography. Students will also develop their computer skills as they incorporate using the internet into their learning of geography. In the economics part of the course, students will learn basic economic ideas like supply and demand, scarcity and choice, opportunity cost, the Federal Reserve System, etc. Comparisons of various economic systems will also take place. The course is taught in a one semester block and one credit is given.

2204 World History II

Credit: 1.00

Grade 10

This course is designed to explore the major people, ideas and events which have shaped the global community throughout history, beginning with the Renaissance and continuing through modern times. The cultural, political and economic histories of Europe, Asia, Africa and the Arab world will be studied in detail. This course will allow students to develop an understanding of how the events of the past, including major wars and political movements, influence current events. Students will take an objective look at world history, rather than viewing it from a traditional American perspective. The knowledge gained in this course will provide students with a solid foundation of modern world history and will serve as a building block for understanding issues facing the world today.

2205 World History II Honors

Credit: 1.00 (Weighted Grade)

Grade 10

World History II Honors focuses on analyzing and evaluating historical events, as well as exploring the diverse cultural, political, economic and technological developments of the time period from the 1450s to modern day. While the same material will be covered in this course as is covered in World History II, the honors class places emphasis upon developing historical and critical thinking skills in students. Students will be challenged through debates, class discussions and various other projects which will allow them to demonstrate their knowledge and form opinions on world issues. In addition, students will be encouraged to make connections between historical events and those which are currently facing the international community. The knowledge gained in this course will provide students with a secure foundation for higher level history courses and an understanding of the influence of world events on their lives.

Prerequisite: A Social Studies Minimum Grade of B and Instructor Recommendation

2207 **American History II**

Credit: 1.00

Grade 11

This course continues the journey through our country's history started in American History I, beginning with the post Civil War era and progressing through the modern history of the nation. In accordance with Pennsylvania State Standards for history, emphasis is placed upon the major political, economic, cultural and technological developments which defined the United States during this time period. Students will gain a basic understanding of the nation's current position in the world by studying the laws, reforms, leaders and events that shaped it. The knowledge gained in this course will serve as a solid foundation for the twelfth grade American Government course.

2208 **American History II Honors**

Credit: 1.00 (Weighted Grade)

Grades 11-12

This course is designed to analyze the major political, social, economic, cultural and technological developments experienced in the United States from the period of time after the Civil War through the present. Students will gain a concrete understanding of the political and cultural movements of this era and of the events that have shaped the current situation of the United States. Emphasis will be placed upon student evaluation of the events in American history, as well as upon recognizing the opportunity to analyze the foreign and domestic policies of the United States throughout its history. Students will be challenged to commit themselves to a higher level of thinking through debates, class projects, research papers and other various applications. This course will not only prepare students for twelfth grade American Government and higher level education, but it will also provide a solid understanding of the influence of U.S. history, while developing personal views and stances on various topics.

Prerequisite: A Social Studies Minimum Grade of B and Instructor Recommendation

2213 **Psychology of Human Behavior**

Credit: 1.00

Grade 11-12

This is an elective course. It will study the relationships of the human nervous system, heredity and environment in shaping human behavior. Various theories of personality development, personality assessment and personality types will be explored, especially as they relate to mental illness and mental health. The psychological development of children will also be covered. This course is taught in a one semester block and one credit is given.

2214 **American Government Honors**

Credit: 1.00 Weighted

Grade 12

An in depth study on the essentials of American national government and Pennsylvania state government that satisfies the state requirements for instruction in the constitutions of the United States and the State of Pennsylvania. This course will require students to compare and contrast historical documents, analyze and critique the structure, process and functions of modern American Government, and complete a detailed analysis of American foreign policy as it relates to modern American society through detailed class discussions, readings and seminars. Student will study comparative economics and governments. The purpose of this course is for students to have a complete understanding of American government and politics as they become aware of the principles of the American system of government and its impact on people and society.

Prerequisite: A Social Studies Minimum Grade of B and Instructor Recommendation

2215 **American Government**

Credit: 1.00

Grade 12

An introductory course on the essentials of American national government and Pennsylvania state government that satisfies the state requirements for instruction in the constitutions of the United States and the State of Pennsylvania. This course will serve as an introduction to the structure, process and functions of modern American Government. The purpose of this course is to familiarize students with the basic principles of the American system of government and its impact on people and society.

2853 **Community Service**

Credit: 0.50

Grades 10-12

In this course, students will evaluate the needs of their community and will develop and implement a service project that will help meet these needs. Communication, interpersonal and research skills, as well as community service are increasingly being required from institutions of higher learning. This course will introduce students to the importance and relevance of volunteer service to the community.

TECHNOLOGY EDUCATION

2701 **Activities in Technology** ^T

Credit: 0.50

Grade 9

Activities in Technology will allow the student to obtain the hands on experience needed to reinforce such disciplines as language arts, reading skills and mathematics. Activities in Technology will provide the student with the understanding of how technology and academics integrate. The student will complete several modular hands-on experiences that will help the student understand the academic disciplines with regards to technology. **This is a required course for all students in Grade 9 and required for graduation.**

2703 **Wood Technology I** ^T

Credit: 1.00

Grades 10-12

This course offers instruction in the safe use and care of selected hand tools and basic woodworking machines. Emphasis is placed upon proper selection of woods and the efficient use of materials. A study of wood joinery and project design are a part of this course.

2704 **Wood Technology II** ^T

Credit: 1.00

Grades 11-12

This is an advanced course in wood dealing primarily with furniture and cabinet design and construction. More complex elements of design, joinery and construction are stressed.

Prerequisite: Wood Tech I and Instructor Recommendation

2710 Architectural Drafting ^T

Credit: 1.00

Grades 11-12

This course teaches students to create a complete three-dimensional CAD model (a house) using CADSOFT Build and gives the student the opportunity to explore the program's many features.

Prerequisite: Instructor Recommendation, CADD I and II

2711 Computer Aided Design and Drafting (CADD)I ^T

Credit: 1.00

Grades 9-12

This course introduces students to Computer Aided Design and Drafting (CADD). Students will use AutoCAD LT 2002 software to create basic shapes and drawings.

2712 Computer Aided Design and Drafting (CADD) II ^T

Credit: 1.00

Grades 10-12

This course teaches students to create orthographic multi-view drawings for mechanical objects using AutoCAD LT 2002.

Prerequisite: Instructor Recommendation, CADD I

2713 Computer Aided Design and Drafting (CADD) III ^T

Credit: 1.00

Grades 11-12

This course teaches students to create two dimensional engineering drawings for mechanical objects using AutoCAD LT 2002.

Prerequisite: Instructor Recommendation, CADD I and II

2714 Computer Aided Design and Drafting (CADD) IV ^T

Credit: 1.00

Grade 12

This course teaches students to create advanced two dimensional engineering drawings for mechanical objects using AutoCAD LT 2002.

Prerequisite: Instructor Recommendation, CADD I, II and II

VOCATIONAL EDUCATION (Erie County Technical School)

The courses described are taught at the Erie County Technical School. Students interested in any of these areas should see their school counselor for information concerning application and selection. Students selected are enrolled in half-day attendance at the Technical School and half-day at their home school. Four (4) credits per year can be earned toward graduation.

Many post-secondary institutions have articulation agreements with ECTS. These agreements allow our students guaranteed admission, advanced placement or exemption from taking certain classes. Articulation agreements save students both time and money for the work they have completed in high school

THREE-YEAR COURSES -- ENTRY LEVEL GRADE 10

COMMUNICATIONS

Commercial Art T

Credit: 4.00

The term “commercial art” is a title encompassing many occupations in which an artisan creates a representation of the specifications of a client. Graduates of the Commercial Art Program, depending upon their talent and work ethic, are prepared to enter the workforce in entry-level positions.

Computer Information Systems T

Credit: 4.00

Students achieve entry-level skills in areas of computer programming, web page design and Microsoft office computer applications. Combined with a background of knowledge, skills and appreciation of the data processing industry, each student is able to seek employment in the area of their interest. Prospective students should be able to think logically, have good speaking, reading and writing skills and pay attention to detail.

Drafting & Design T

Credit: 4.00

Drafting careers are changing rapidly as computer technology replaces traditional procedures and functions. The Drafting & Design course instructs students in industry standards and prepares students to step into the workplace or it gives them an important edge, if choosing to further their education in this field. Drafting, mechanical drafting and CAD involve making precise, instrument-aided drawings that show how to construct machines, buildings and infrastructures. Prospective students should possess the following characteristics: creative mind and good imagination, logical thinking, basic math skills, accuracy and artistic ability.

Graphic Communications T

Credit: 4.00

The graphic communications program introduces students to theoretical aspects as well as hands-on experiences using computers, design and editing programs, dark-room equipment and printing presses. Students acquire marketable skills in job planning, design and layout, copy preparation, proofing, platemaking, offset press operation, bindery and finishing. Prospective students should possess the following characteristics: creative mind, good background in English and spelling, mechanical skills, good attention to detail, organized and neat, self directed with math and measurement skills.

CONSTRUCTION

Construction Trades T

Credit: 4.00

This program prepares students to enter the building trades industry with marketable skills. This encompasses all phases of residential construction. Prospective students should have mechanical aptitude, coordination, stamina, physical strength, manual dexterity, mechanical dexterity, good attendance and no fear of heights.

Facility Engineering T

Credit: 4.00

This unique and highly versatile course offers several trades in one for the student who is interested in becoming a skilled craftsperson in a variety of trades. Course content includes shop safety, proper use of hand and power tools, basic construction, plumbing, painting, electricity, hydraulics, welding, basic machining, motor control and HVAC. Prospective students should have physical stamina, mechanical aptitude, responsibility, manual dexterity, coordination and patience. Average to above average math and reading skills are required.

HUMAN SERVICES

Child Care T

The Child Care program provides the student with the necessary skills for entry-level positions in the child care field, with an emphasis on the preschool environment. Prospective students should enjoy children and have a pleasant personality, even temperament, patience and good communication skills, particularly spelling and grammar.

Cosmetology T

Credit: 4.00

Cosmetology is an art and a science involving the study of the skin, hair and nails. The Cosmetology program provides each student with the knowledge and skills required to become a licensed cosmetologist. The license requires 1,250 hours of instruction. Prospective students should possess creative and artistic aptitude, enjoy working with people, physical stamina, flexibility, patience, good attitude and good attendance.

Culinary Arts T

Credit: 4.00

The Culinary Arts program assists the student who is interested in the fast-paced and ever-growing food services industry. The program offers a comprehensive presentation of basic principles and techniques necessary to obtain an entry-level position in the food service industry or prepare for continued training and education. Students in Culinary Arts have the opportunity to earn certifications from the American Culinary Federation and the Erie County Health Department. Prospective students should enjoy working with people and be able to work well under pressure, have physical stamina and coordination, good organizational skills and basic math and reading ability.

Health Assistant T

Credit: 4.00

The Health Assistant program is ideal for students considering a career in the health and medical field. This program introduces students to various career opportunities that exist in health care. It prepares the student to enter the health care system as a competent assistant to the health care professional. Students in this program can earn CPR Certification, Elder Abuse Certification and Department of Health Certifications relating to infection control and disease transmission. Prospective students should possess good communication and interpersonal skills, neatness and cleanliness, manual dexterity, good professional appearance, the ability to maintain confidentiality and the ability to lift fifty (50) pounds.

MANUFACTURING

Electrical Engineering T

Credit: 4.00

Students in this program learn the fundamentals of electrical skills and theory. The electrical engineering students acquire the skills for employment in all industrial electricity occupations. The students learn in detail the theory and hands-on application of alternating current, direct current, hydraulics, pneumatics, motor controls, programmable logic controllers and residential wiring. Prospective students should possess mechanical aptitude, ability in basic math and manual dexterity.

Electronics T

Credit: 4.00

The increasing complexity and expansion of technology is increasing the demand for trained electronic technicians. This electronics program teaches the fundamentals of basic electricity, electronics and digital electronics and prepares students for a variety of entry-level positions in the electronics field. Students in this lab can earn their National Electronics Technician Association Certificate. Prospective students should have good reading, writing and communication skills.

Metal Fabrication ^T

Credit: 4.00

This is a comprehensive program designed to give students entry-level skills in the field of metal fabrication. Areas of study include the techniques and fundamentals of pattern development, fabrication, design, proper use of hand and power tools, SMAW (arc welding), acetylene cutting, Plasma cutting, GMAW (mig), GTAW (tig) and FCAW (flux-core). Prospective students need manual dexterity, mechanical aptitude, physical stamina and basic math skills.

Plastics Technology

Students in this program learn the fundamentals of plastics technology. This course allows a high school student to begin working towards an associate or baccalaureate degree in Plastics Technology. Classroom and hands-on instruction prepare the student for the technician-level skills in plastics processing. This course covers the skills necessary for becoming injection molding machine operators, inspectors and mold set-up and processing personnel. Focus is on injection molding machine safety, mold setup and machine operation. The prospective student should possess mechanical aptitude and enjoy hands-on work, have good math and science skills, the ability to comprehend technical manuals, effective communication skills, be able to work independently, have critical thinking and problem solving skills.

Tool & Die ^T

Credit: 4.00

The machinist is a skilled worker who forms and shapes metals from their raw state to a finely finished and accurately shaped part. Students trained in this program develop the necessary skills to be entry-level machinists. They also have the opportunity to earn NIMS machining and metalworking certifications, which are accepted as trade specific competence anywhere in the USA. Prospective students should possess above average math skills, good work attitudes, mechanical aptitude, hand-eye coordination and the patience to work neatly and accurately. The challenged and motivated student should consider this program as a basis for manufacturing and process knowledge for college engineering programs.

TRANSPORTATION

Auto Body ^T

Credit: 4.00

This course presents current and future practices in the rapidly changing world of auto body repair. Projects and class work use the latest technologies, equipment and shop practices. Prospective students should have good hand-eye coordination, manual dexterity, multi-limb coordination, mechanical aptitude, skill with tools, physical strength, accuracy and the ability to work with minimal supervision

Automotive Technologies T

Credit: 4.00

Changes in automotive technology have increased the importance of the automotive technician. This program provides the student with the theory and practical experience needed to diagnose and repair automotive systems. Students in Automotive Technologies work towards their state inspection requirements for a class one license and have the opportunity to earn ASE certification. Exceptional students may qualify for an AYES internship at the end of their junior year. Students are able to get their PA Enhanced Emission Inspector Certification. Prospective students should have mechanical aptitude, manual dexterity, skill with tools, physical stamina, good hand-eye coordination, physical strength, willingness to work in an uncomfortable environment and the ability to think logically.

Seniors Only **Networking Technologies T**

Credit: 4.00

This program teaches students to design, build and maintain computer networks. The curriculum covers a broad range of topics from basic networking skills to more complex concepts such as applying troubleshooting tools. This course is designed to provide students with classroom and laboratory experiences in emerging networking technology that will empower them to further their education in the networking field. Students who successfully complete this program are eligible to earn Cisco Certified Network Associate (CCNA™) certification. Prospective students should be able to think logically and have good math and science skills. They should have the ability to pay attention to detail, show initiative and work independently.

Plastics Technology T

Credit: 4.00

Students in this program learn the fundamentals of plastics technology. This course allows a high school student to begin working toward an associate or baccalaureate degree in Plastics Technology. Classroom and hands-on instruction prepare the student for the technician-level skills in plastics processing. This course covers the skills necessary for becoming injection molding machine operators, inspectors and mold set-up and processing personnel. Focus is on injection molding machine safety, mold setup and machine operation. The prospective student should possess mechanical aptitude and enjoy hands-on work, have good math and science skills, the ability to comprehend technical manuals, effective communication skills, be able to work independently, have critical thinking and problem solving skills.

Tourism & Hospitality Management T

Credit: 4.00

The Tourism & Hospitality Management program has everything you will need to get started on a hospitality career. In this program, students participate in classroom activities that teach valuable lodging skills and knowledge. Students will also participate in internships supervised by the instructor and a worksite mentor. Major instructional units in the curriculum include: an overview of lodging management, the front office, housekeeping, leadership and management, marketing and sales, and food and beverage service. This program corresponds to competency lists used in the American Hotel & Motel Association's Educational Institute's post-secondary curriculum and forms the basis for articulation agreements with colleges and universities. Students in this program will have the opportunity to earn certificates in lodging management, health and sanitation and responsible alcohol management. Prospective students should enjoy working with the public, have patience and good people skills, be willing to perform a variety of tasks, be able to work well under pressure, possess good organizational skills, be a self starter, dependable and professional.

CYBER SCHOOL

Students may need to find additional classes to satisfy graduation requirements. In order to complete the requirements, students may request cyber school credits. It is encouraged that students complete these credits at the high school. Space will be limited to those that need to fulfill graduation requirements and have no other option within the schools' specified curriculum.

COLLEGE CREDITS

If students qualify, they may take college credits through one of our articulation agreements with Edinboro University of Pennsylvania or Gannon University. These spaces are limited to seniors only. If you have questions, please contact the senior high counseling office.

REGIONAL CHOICE INITIATIVE

Iroquois School District participates in two Regional Choice Initiatives (RCI).

RCI I is a collaborative agreement between North East, Millcreek and Harbor Creek School Districts to enhance learning by offering courses not available at the student's home school. ROTC is also a part of the RCI program offered at Seneca High School. Additional information can be obtained from the senior high counseling office.

RCI II is a collaborative agreement between Edinboro and Gannon Universities. These two universities provide professors and college-level courses at a lesser cost than traditional college credits. This is a way for students to begin their college experience early. All credits obtained in the RCI II program will transfer to either university. Additional information can be obtained from the senior high counseling office.