Elk County Catholic High School

Course Catalog
2023-2024

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School & Community

Elk County Catholic High School, part of the Elk County Catholic School System, is located in rural northwestern Pennsylvania in the community of St. Marys. A parochial high school with a total enrollment of 218 in grades 9-12, there are 24 faculty members with an average class size of 16. Elk County Catholic is accredited by both the Middle States Association and the Pennsylvania Department of Education. The school year is divided by quarters consisting of nine weeks each.

Grading System

A - 94%-99%
B - 86%-93%
C - 78%-85%
D - 70%-77%
F - 69% or below

Courses that are graded Pass/Fail are indicated in the course catalog

Class Ranking System

Students receive an overall numeric average (Grade Point Average - GPA) each quarter. At the end of each semester, this average is then adjusted (Adjusted GPA) for courses taken at the accelerated, advanced and advanced placement levels. The Adjusted GPA is calculated by multiplying the numeric grade of each weighted course by a multiple (1.02 for accelerated classes, 1.03 for advanced classes, 1.06 for dual enrollment classes and 1.1 for advanced placement classes) and then averaging it into the overall GPA. Cumulative GPA and class ranking are determined at the end of each semester.

Graduation Requirements

Elk County Catholic High School requires a minimum of **26 credits** in order to graduate. The breakdown of credits is as follows:

Units of Credit	Course Titles
4	Theology*
4	English
4	Mathematics
3	Science
4	Social Studies
1	Health
1	Physical Education
1	Tech Foundations
1/3	Driver's Education (classroom)
1/3	Sophomore Seminar
1/3	SAT Math
3	Personal Choices – Electives

*Students must complete 20 ECHO service hours per year and a reflection paper each year in order to successfully complete each Theology course.

Important Notice

Every effort has been made to keep the information in this catalog complete and accurate. However, changes may be made to courses descriptions or requirements. Parents and students will be notified if that should occur.

Elk County Catholic High School Course Offerings

Courses are listed by department. Those marked with an asterisk (*) are accelerated, advanced, or advanced placement classes and are weighted in the ranking system.

English

English I, II, III, IV
* Accelerated English II
* AP Language & Composition
* AP English IV/Literature & Composition
Creative Writing I
English as a Second Language
Speech Communications
Independent Writing

Mathematics

Algebra I, II
Geometry
SAT Math
College Algebra
* Pre-Calculus
* Calculus
* AP Calculus AB
* AP Calculus BC
Integrated Mathematics
* Statistics

Business/Technology

Technology Foundations
Accounting I
Introduction to Drafting
Drafting I, II, III
Independent Computers I, II (P/F)
* Accounting II
Sophomore Seminar
* AP Computer Science Principles
Personal Finance
Contemporary Business Concepts
FBLA Class
*AP Computer Science A

Theology

Theology I, II, III, IV

Career Education:

Sophomore Seminar
School to Work
Open Campus Courses with SMAHS
Peer Tutoring/Mentoring

Science

Principles of Biology
Biology
*Accelerated Biology
*AP Biology
Consumer Chemistry
Chemistry I, II
*AP Chemistry
Physical Science
*Physics I, II
Environmental Science
*Human Anatomy and Physiology (HAP)
*AP Environmental Science

Social Studies

American History
American Political Behavior
Western Civilization I, II
Economics
Psychology
Sociology
Medal of Honor

Health/Physical Education

Health I, II
Physical Education I, II
Driver's Education
Elective Physical Education (P/F)

Art

Art (P/F)
Advanced Art

Foreign Language

Spanish I, II
* Spanish III, IV, V
Latin I (online course through Imagine Learning)

Music

Chorus (P/F)
Instrumental Music (P/F)

DEPARTMENT: BUSINESS/TECHNOLOGY

TECHNOLOGY FOUNDATIONS

Credit: 1.0
Weight: 1.0

Level: Grade 9
Prerequisites: None

Textbook:
Instructional Materials: Textbook, Microsoft Word, PowerPoint, Excel and Access, Pages, Numbers, and Keynote

Course Rationale and Description:
Tech Foundations is designed to promote computer literacy. The course is divided into four software sections each studying a different software application, its uses and its capabilities. Hardware topics
will include the design and functions of the classroom computer system. Students will be introduced to the vocabulary of computer technology and techniques standard to the word processor, presentation, spreadsheet, and database. Fundamentals of applications on iPads equivalent to hardware presented will also be introduced.

Course Topics:
- Possess computer literacy
- Use Basic Operating Systems
- Use a Word Processing Program on computers and iPads
- Use a presentation program on computers and iPads
- Use the Internet
- Integrate Applications
- Use a Spreadsheet program on computers and iPads
- Use a Database program

Additional Activities:
Digital Citizenship

ACCOUNTING I

Credit: 1.0
Weight: 1.0

Level: Grade 11, 12
Prerequisites: None

Textbook: Accounting: Eighth Edition
Instructional Materials: Textbook, Handouts, Microsoft Excel

Course Rationale and Description: Accounting I is a one year elective designed for the business or college bound student. Accounting I is the study of the basic language, concepts, and procedures of an accounting system. Students will learn to journalize and post business transactions for a service business organized as a proprietorship and a merchandising businesses organized as a corporation. The students will become competent in summarizing and analyzing this information so it can be entered into permanent financial records.

Course Topics: Accounting Equation, T-accounts, Journalizing, Posting, Cash Flow

Systems, Worksheets, Financial Statements, Period End Accounting

Additional Activities: Business Simulations

ACCOUNTING II

Credit: 1.0
Weight: 1.0

Level: Grade 12
Prerequisites: Successful completion of Accounting I Recommendation of Accounting I teacher

Textbook: *Accounting: Eighth Edition*
Instructional Materials: Textbook, Handouts, Microsoft Excel

Course Rationale and Description: Accounting II is a one year elective designed for the business and college bound business major. Account II is an independent course that builds upon the basics acquired in Accounting I. This course will review, improve, and broaden the student's knowledge and understanding of accounting concepts and procedures learned in Accounting I.

Course Topics: Uncollectible Accounts, Depreciation, Inventory, Notes Payable and Receivable, Accrued Revenue and Expenses, End-of-Fiscal-Period Work

Additional Activities: Business Simulation, Automated Accounting

BUSINESS CONCEPTS

Credit: 0.5
Weight: 0.5

Level: Grade 11, 12
Prerequisites: None

Textbook: *Principles of Business, 8th Edition*
Instructional Materials: Textbook, online resources

Course Rationale and Description:
Business Concepts is an elective course at ECC. It is designed to give you a basic introduction to a variety of business topics. Through a series of guided lessons, activities, and projects, you will become more adept at understanding topics such as entrepreneurship, finance, economics, global business, management, and marketing.

Course Topics:
- Economic Decisions and Systems
- Economic Activity
- Business in the Global Economy
- Social Responsibility of Business and Government
- Business Organization
- Entrepreneurship and Small Business Management
- Management and Leadership
- Human Resources, Culture, and Diversity
- Career Planning and Development
- Marketing
- Business and Technology
- Financial Management
- Production and Business Operations

- Risk Management

Additional Activities:
Field trips, guest speakers, hand-on experience with a small business (school store)

DRAFTING I

Credit: 1.00
Weight: 1.00

Level: Grades 9, 10, 11, 12
Prerequisites: None

Textbook: None
Instructional Materials: Students will be using computers equipped with the AutoCAD 2017 program and drafting hand-outs during class time. It is assumed that the student does not have access to a
computer and software at home.

Course Rationale and Description: Communication is an essential component to any successful endeavor involving two or more people. As a form of visual communication, the mechanical drawing is an initial step in any manufacturing, construction or technological process. As students entering manufacturing, construction, or technological environments, the Drafting courses will
provide insight into this visual language. Instruction will include traditional orthographic (2-D) drawing with dimensioning and 3-D isometric drawing.
Note: The first semester of Drafting I will be basically the same as the Intro to Drafting course. Those students who have previously taken Intro to Drafting will be expected to properly dimension their projects and provide detail to their projects not expected of those who have not previously taken
Intro to Drafting. The second semester of Drafting I will be the same for all students, whether or not they have previously taken Intro to Drafting.

Course Topics:
Introduction to AutoCAD 2017
Sketching
(Rough/Refined)
Orthographic Drawing
Dimensioning
3-D Isometric Drawings

Additional Activities:
3-D Printing

DRAFTING II

Credit: 1.00
Weight: 1.00

Level: Grades 10, 11, 12

Prerequisites: Drafting I (Must have maintained an average of 86.00 for each of the four quarters.)

Textbook: None
Instructional Materials:
Students will be using computers equipped with the AutoCAD 2017 program and drafting hand-outs during class time. It is assumed that the student does not have access to a computer and software

at home.

Course Rationale and Description:
Communication is an essential component to any successful endeavor involving two or more people. As a form of visual communication, the mechanical drawing is an initial step in any manufacturing, construction or technological process. As students entering manufacturing, construction, or technological environments, the Drafting courses will provide insight into this visual language. Instruction will include traditional orthographic (2-D) drawing with dimensioning and 3-D isometric drawing.
The Drafting II course will build on the concepts learned in Drafting I, both in the intricacy of the projects assigned and in the detail utilized to properly define and dimension the geometry of these projects.

Course Topics:
AutoCAD 2017 and Local Area Networks
Orthographic
Drawing Auxiliary
Views Dimensioning
3-D Isometric Drawings

Additional Activities:
3-D Printing

DRAFTING III

Credit: 0.50
Level: Grades 11, 12 **Weight:** 0.50
Prerequisites: Drafting II (Must have maintained an average of 94.00 for each of the four quarters.) THIS COURSE CAN ONLY BE SCHEDULED WITH PERMISSION OF THE INSTRUCTOR.

Textbook: None
Instructional Materials: Students will be using computers equipped with the AutoCAD 2017 program and drafting hand-outs during class time. It is assumed that the student does not have access to a computer and software at home.

Course Rationale and Description:
Communication is an essential component to any successful endeavor involving two or more people. As a form of visual communication, the mechanical drawing is an initial step in any manufacturing, construction or technological process. As students entering manufacturing, construction, or technological environments, the Drafting courses will provide insight into this visual language. Instruction will include traditional orthographic (2-D) drawing with dimensioning and 3-D isometric drawing.
The Drafting III course will build on the concepts learned in Drafting I and II. Contents of this course will be flexible in order to help meet the needs and interests of the individual students.

Course Topics:
AutoCAD 2017 and Local Area Networks
Orthographic
Drawing Auxiliary
Views Dimensioning
3-D Isometric Drawings

Additional Activities:
3-D Printing

INDEPENDENT COMPUTER I AND II

Credit: 0.5
Level: Grade 11, 12 **Weight:** 0.5
Prerequisites: Technology Foundations (Grade B or better), Approval from Guidance and Business/Technology Department

Textbook: None
Instructional Materials: Will vary depending on the content area on which the student chooses to focus.

Course Rationale and Description:
Independent computers is an elective advanced computer course at ECC. It is offered to students who have excelled in previous computer courses and have a desire to engage in further study of
computer-related topics. Students may take this course for one or two semesters.

Course Topics:
Topics to be studied may include desktop publishing, web design, app development, or another topic of interest to the student.

Additional Activities: The "Goals Assessment" form will need to be completed when scheduling this course.

INTRODUCTION TO DRAFTING

Credit: 0.50
Level: Grades 9, 10, 11, 12 **Weight:** 0.50
Prerequisites: None

Textbook: None
Instructional Materials: Students will be using computers equipped with the AutoCAD 2017 program and drafting hand-outs during class time. It is assumed that the student does not have access to a
computer and software at home.

Course Rationale and Description: Communication is an essential component to any successful endeavor involving two or more people. As a form of visual communication, the mechanical drawing is an initial step in any manufacturing, construction or technological process. As students entering manufacturing, construction, or technological environments, the Drafting courses will
provide insight into this visual language. Instruction will include traditional orthographic (2-D) drawing with dimensioning and 3-D isometric drawing.

Course Topics:
Introduction to AutoCAD 2017 and Local Area Networks
Sketching
(Rough/Refined)
Orthographic Drawing
Dimensioning
3-D Isometric Drawings

Additional Activities:
3-D Printing

FBLA (FUTURE BUSINESS LEADERS OF AMERICA) CLASS

Credit: 0.5
Weight 1.0

Level: 9, 10, 11, 12
Prerequisites: None

Textbook: None
Instructional Materials: Online resources, various textbooks and learning materials

Course Rationale and Description:
FBLA class is an elective course at ECC. It is designed to expand the opportunities provided to students through the FBLA club. This course is especially recommended for those students seeking to
hold an office within the organization. Students will get real-world experience while striving to keep the FBLA small business running efficiently. Preparation for the student's chosen area of competition will be included in the activities of the class.

Course Topics:
- Small Business Management
- Inventory
- Marketing
- Staffing
- Purchasing
- Individualized Competition Preparation

Additional Activities:
Hands-on experience with running a business (FBLA school store and vending machines)

PERSONAL FINANCE

Credit: 0.5
Weight: 0.5

Level: 12
Prerequisites: None

Textbook: None
Instructional Materials: Electronic handouts, online resources

Course Rationale and Description:
Personal Finance is an elective course at ECC. It is designed to help students learn the knowledge, skills, and processes required to make sound financial decisions and manage their own personal finances. Through a series of guided lessons, activities, and projects, students will engage in lessons that develop critical thinking, problem solving, and decision-making.

Course Topics:
- Goals & Decision Making
- Careers & Planning
- Budgeting
- Saving & Investing
- Credit
- Banking Services
- Transportation Issues
- Housing Issues
- Risk Protection

Additional Activities:
Field trips, guest speakers

AP COMPUTER SCIENCE PRINCIPLES

Credit: 1.0
Weight: 1.10/1.06

Level: 11,12
Prerequisites: None

Textbook: None
Instructional Materials: Electronic handouts, online resources through Code.org

Course Rationale and Description:
AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. It is important to note that the AP Computer Science Principles course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their students to use in the classroom.

Course Topics:
- Creative Development
- Data
- Algorithms and Programming
- Computing Systems and Networks
- Impact of Computing

AP COMPUTER SCIENCE A

Credit: 1.0
Weight: 1.10/1.06

Level: 11,12
Prerequisites: None

Textbook: None
Instructional Materials: Electronic handouts, online resources through Code.org

Course Rationale and Description: AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures.

AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.

Course Topics:
- Modularity
- Variables
- Control
- Impact of Computing

MAKING MEMORIES

Credit: 0.50/1.0
Weight: Pass/Fail

Level: Grade 11,12
Prerequisites: Teacher Recommendation

Textbook: None
Instructional Materials: Yearbook Software

Course Rationale and Description: In this course students will work to complete the school yearbook. In the process students will work in the areas of photography, writing, and online layout and publishing using Jostens' online platform. The students will also construct the monthly newspaper page.

DEPARTMENT: ENGLISH

ENGLISH I - Ancient Literature and Composition **Credit:** 1.00
Level: Grade 9 **Weight:** 1.00
Prerequisites: Successful completion of 8th grade English

Textbook: *Elements of Literature*
Instructional Materials: Textbooks, novels, handouts, videos

Course Rationale and Description:
Students will introduced to ancient writings and authors and works about ancient times. Works will be read, evaluated, and correlated with writing techniques. Students will be develop thesis statements, essays, and research using MLA format and an emphasis on grammar, including punctuation, structure, and mechanics.

Course Topics:
Short stories
Novels
Poetry
Epics
Research
Nonfiction
Drama
Vocabulary
Essays

Additional Activities:
Lectures, reading, projects, presentations, group work, essays, discussion, research

ENGLISH II - European Literature and Composition **Credit:** 1.00
Level: Grade 10 **Weight:** 1.00
Prerequisites: English I

Textbook: *Elements of Literature*
Instructional Materials: Textbooks, novels, handouts, videos

Course Rationale and Description:
Students will introduced to medieval writings and authors and works about times. Works will be read, evaluated, and correlated with writing techniques. Students will be develop thesis statements, essays, and research using MLA format and an emphasis on grammar, including punctuation, structure, and mechanics.

Course Topics:
Short stories
Novels
Poetry
Epics
Research
Nonfiction
Drama
Vocabulary
Essays

Additional Activities:
Lectures, reading, projects, presentations, group work, essays, discussion, research

ACCELERATED ENGLISH II - European Literature and Introduction to Rhetoric

Credit: 1.00

Level: Grade 10

Weight: 1.02

Prerequisites: A. Successful completion of English I with a 92%
B. Recommendation of English I Teacher
C. 70th percentile score on standardized testing

Textbook: Elements of Literature
Instructional Materials: Textbooks, novels, handouts, videos

Course Rationale and Description:
Students will introduced to ancient writings and authors and works about ancient times. Works will be read, evaluated, and correlated with writing techniques. Students will be develop thesis statements, essays, and research using MLA format and an emphasis on grammar, including punctuation, structure, and mechanics.

Course Topics:

Short stories
Novels
Poetry
Epics
Research
Nonfiction
Drama
Vocabulary
Essays

Additional Activities:
Lectures, reading, projects, presentations, group work, essays, discussion, research

ENGLISH III – American Rhetoric and Composition

Credit: 1.0

Level: Grade 11

Weight: 1.0

Prerequisites: English I & II

Textbook: Elements of Literature
Instructional Materials:
Textbooks, novels, study guides, videos, podcasts, worksheets

Course Rationale and Description:
English III is the study of literature of the United States and Americas. The course is focused on how writing and literature is influenced by the society and events in which the writer has lived. Students will learn the literary techniques of American writers and will continue to develop the composition skills required by the eleventh grade student. This course will also emphasize the composition skills necessary for the writing of the MLA research paper.

Course Topics:
Literature – Chronological study of American Literature
Writing – essays (expository, narrative, persuasive, etc), research paper
Research Method – MLA

Additional Activities:
Discussion (class & small group), presentations, projects (individual and group), directed research

ENGLISH IV- Contemporary Rhetoric and Composition

Credit: 1.00
Level: Grade 12
Weight: 1.00
Prerequisites: English I, II, III

Textbook: Elements of Literature
Instructional Materials: Textbooks, novels, study guides, videos, podcasts, worksheets

Course Rationale and Description:
English IV is the study of contemporary literature. The course is focused on how writing and literature is influenced by the society and events in which the writer has lived. Students will learn the literary techniques of contemporary writers and will continue to develop the composition skills required by the twelfth grade student. This course will also emphasize the composition skills necessary for the writing of the APA research paper.

Course Topics:
Literature – Study of Contemporary Literature and Authors
Writing – essays (expository, narrative, persuasive, etc), research paper
Research Method - APA

Additional Activities:
Discussion (class & small group), presentations, projects (individual and group), directed research

AP LANGUAGE AND COMPOSITION

Credit: 1.00
Level: Senior and Junior
Weight: 1.10/1.06
Prerequisites: Students must meet a minimum of 2 of the following:
A. Teacher recommendation
B. 85% or better in English I and English II
C. 70th percentile score on standardized testing

Textbook: The Language of Composition: Reading Writing and Rhetoric. Second Edition
Instructional Materials: Textbook, novels, handouts, videos

Course Rationale and Description: The purpose of this course is to enable students to write effectively and confidently in their college courses across the curriculum and in their professional and personal lives. Students in this course will engage in multiple forms of both formal and informal writing in response to a broad and challenging range of primarily nonfiction works from a variety of authors and historical contexts. While nonfiction will be emphasized, we will also examine rhetoric at work in fiction, drama, and poetry. Close reading techniques will be used to improve understanding of rhetoric, language use, purpose, and strategy while frequent writing assignments (ranging from journals to timed writing to extended formal research papers) will give students the opportunity to develop their own writing style and the confidence to utilize rhetorical strategies in a variety of modes for a variety of audiences. Students will examine essays, letters, speeches, novels, poetry, plays, imaginative nonfiction, and visual literature as organized by thematic unit and in turn craft their own expository, analytical, personal, and argumentative essays. The steps of the writing process will be enforced through individual and group activities.

Course Topics: Non-fiction, fiction, poetry, essays, novels, rhetoric, argument

Additional Activities:
Socratic Seminar, group work, debates, presentations, papers, novels

AP LITERATURE AND COMPOSITION

Credit: 1.00
Level: Senior **Weight:** 1.10/1.06
Prerequisites: Students must meet at least 2 of the following requirements for admission into the class:
A. Teacher recommendation
B. 85% or better in English I, English II, and English III
C. 70th percentile score on standardized testing

Textbook: *Perrine's Literature Structure, Sound and Sense*
Instructional Materials: Novels, textbook, handouts, poetry, short story, dramas, iPads

Course Rationale and Description:
An AP English Literature and Composition course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone.

Course Topics: Close reading, analysis, writing, literary devices

Additional Activities: Socratic Seminar, group work, debates, presentations, papers, novels, exam preparation

CREATIVE WRITING

Credit: 0.50
Level: Grades 9, 10, 11, 12 **Weight:** 0.50
Prerequisites: None

Textbook: None
Instructional Materials: Various books, magazines, worksheets and internet sources

Course Rationale and Description: Creative Writing is an 18-week (one semester) elective open to all interested students in grades 9 through 12. Students will have the opportunity to create a variety of original works including short stories, poems, and drama. Students will draw from personal experiences and their imaginations. Students will be exposed to the writings of various authors and poets to draw inspiration from. They will essentially become editors, writers, artists, publishers and audience.

Course Topics:
Character sketches
Personal narratives
Descriptive narratives
Poetry
Short stories
Peer editing

INDEPENDENT WRITING

Credit: 0.50/1.00
Level: Grades 11,12 **Weight:** 0.50/1.00
Prerequisites: Creative Writing

Textbook: None
Instructional Materials: Writing Samples and guides

Course Rationale and Description:
This course is for the student who wants to advance their writing skills. Students will explore and write

in different styles and formats. Students work independently on writing assignments with the teacher as a guide.

Course Topics:
Various styles of writing (narrative, descriptive, expository, etc.))
Various writing formats: prose, poem, newspaper, magazine, etc.)

Additional Activities:
Guides, web activity, projects

SPEECH COMMUNICATION

Credit: 0.50
Weight: 0.50
Level: Grades 9, 10, 11, 12
Prerequisites: None

Textbook: *The Complete Book of Speech Communication*
Instructional Materials: Textbook, worksheets, lectures, videos, internet sources, quizzes

Course Rationale and Description:
Students will learn various types of speech, manners and delivery, and models and organization while building confidence.

Course Topics:
Descriptive speech
Demonstrative speech
Manners and etiquette
Narrative speech
Informative speech
Persuasive speech
Argument and debate
Storytelling

Additional Activities: Group work, Outside speaking engagements

DEPARTMENT: CAREER EDUCATION

SCHOOL TO WORK CO-OP PROGRAM

Credit: 0.5
Level: Grade 12 – Second Semester **Weight:** Pass/Fail
Prerequisites: High school seniors who fulfill their course requirements and are on track for graduation, demonstrate good work habits and positive character, attends school regularly, and are free of discipline or technology issues.

Note: *The School to Work Co-op Program begins in the second semester of the year for seniors with the student working approximately 20 hours per week. Student is typically dismissed early from school for this program. Students participating in school-to-work* ***are*** *able to participate in extra-curricular activities.*

Course Rationale and Description: The Co-op program provides high school seniors the opportunity to earn course credit while getting real world work experience. It is available to seniors who meet the following criteria: fulfill their course requirements and are on track for graduation, demonstrate good work habits and positive character, attends school regularly, and are free of discipline or technology issues.
This program helps students gain practical work experience toward lifetime career goals and may lead to entering the workforce as a full-time employee. It also helps students make an informed choice on skills needed for post-secondary education and the job market.

SOPHOMORE SEMINAR

Credit: 0.33
Level: Grade 10 **Weight:** 0.33
Prerequisites: None

Textbook: None
Instructional Materials: Handouts, videos, pdf

Course Rationale and Description:
This course is designed with emphasis placed upon students' exploration of career-oriented aspects. Students will conduct research of occupations and employment, increase awareness of education and training requirements necessary to realize personal career choices, and develop competency as life-long planners. Speech communication skills and test taking skills are integrated into the course
Course Topics:
Career Exploration, Post-secondary education requirements, job skills, communication skills, SAT and ACT test taking skills

Additional Activities:
Prepare an electronic portfolio including activity resume and educational goals.

PEER TUTORING/MENTORING

Credit: 0.50
Level: Grade 11, 12 **Weight:** Pass/Fail
Prerequisites: None

Prerequisites: Interest in a career in education, social work or another related area, there are limited spaces available and interested students will be screened and selected by the Inclusion Coordinator.

Course Rationale and Description: Students will be assigned to a classroom to work with a student with an identified need where they will serve as tutor and peer mentor. Students will provide academic assistance in the classroom setting. Training and expectations will be monitored by the Inclusion Coordinator. There may be training requirements for students outside of the regular school day.

Target group for peer mentors: students who are interested in a career in education or a social service field

OPEN CAMPUS AT ST. MARYS AREA

Credit: varies
Weight: varies

Level: Grade 12
Prerequisites: None

Course Description: Seniors may have the opportunity to complete coursework not offered at ECCHS through the open campus program with the St. Marys Area School District. The majority of courses relate to areas involving career readiness. Course availability will vary from year to year. Students may only participate in Open Campus courses at St. Marys Area if the participation does not interfere with completion of ECCHS graduation requirements. Students will be responsible for their own transportation to and from St. Marys Area High School.

Students will have the opportunity to enroll in the following courses at Saint Marys Area:

- Woodworking Trades
- Metalworking Trades
- Dutch Manufacturing
- Firefighting
- Medical Terminology
- Certified Nurse Assistant

Enrollment in the Open Campus program is contingent upon successful completion of ECCHS graduation requirements. Students may only enroll in one of these programs. Students who enroll in the Open Campus program may NOT enroll in the ECC School to Work Program.

Students are required to provide their own transportation to and from Saint Marys Area High School.

A complete course agreement must be completed before enrolling in the Open Campus Program

DEPARTMENT: FINE ARTS

ART

Credit: 0.50/1.00
Level: Grades 9, 10, 11, 12
Weight: Pass/Fail
Prerequisites: None
Note: *Students are limited to one art course (one credit) per year. The exception would be any senior, who has registered their career interest in art/art related field with the guidance office, may schedule more than one art class.*

Textbook: None
Instructional Materials: Various art media, online materials

Course Rationale and Description: Students will be involved in a unique series of studio drawing and painting activities such as pencil shading, colored pencil, watercolor and acrylic painting, as well as hand built and wheel-thrown objects. These activities are designed to develop and enrich the creative thought process.

Course Topics May Include:
- Watercolor / Acrylic Painting
- Drawing with various media
- Hand-built and wheel-thrown pottery
- Advanced topics in consultation with the instructor

ADVANCED PLACEMENT (AP) ART STUDIO ART

Level: Grade 11-12
Prerequisites: Successful completion of Art 1 with teacher recommendation

Instructional Materials: Various art media, online materials

Course Rationale and Description:

Credit: 1.0

Weight: 1.10

Advanced Placement(AP) Art is an elective for students at ECCHS, it is a College board course designed to help students experience a college-level art
course. AP Art students spend the school year creating artwork to include in a portfolio. They will explore topics that focus on the ideation and the creation of their portfolio.

All AP Students are expected to submit a portfolio at the end of the semester.
- 16 works of art are created over the course of the school year, 15 are selected and digitally submitted.

There is a cost associated with submitting your portfolio. If that is an issue students should meet the teacher one on one to discuss options. Summer work is required for this course.

ADVANCED ART

Level: Grade 11-12 **Credit**: 1.0
Prerequisites: Successful completion of Art 1 with teacher recommendation **Weight**: 1.00

Instructional Materials: Various art media, online materials

Course Rationale and Description:

Course Rationale and Description: Advanced Art is an elective course for students in grades 10, 11, 12. This is a year-long course that is designed to expand student's understanding of art concepts that were taught in Art. In this course, you will have a chance to explore topics that focus on your interests through 2D and 3D artwork. We will use a variety of materials including pencil, charcoal, watercolor, acrylic, mixed media, oil, clay and sculpture. Students will develop their skills in visual communication through art. Students will expand their knowledge of artists and art history. This is graded based on your projects, daily work, your sketchbook, and your artist reflections.

INSTRUMENTAL MUSIC

Credit: 0.25/.050
Level: Grades 9, 10, 11, 12 **Weight:** Pass/Fail
Prerequisites: None

Textbook: None
Instructional Materials: Literature, Internet, CD's, and DVD's

Course Rationale and Description: Band Class meets 3 times out of the 6 day cycle and is designed for 9th through 12th graders who are currently involved in the Elk Catholic Band Program, or incoming students with instrumental experience. Players will develop their musical skills through a variety of exercises and experiences, as well as performance opportunities. This class will act in concordance, or as a supplement to the current after-school band rehearsal schedule. Students will be evaluated by achievement and progress. All ECC Band members should attempt to schedule this class

Course Topics:

- Sound Production
- Rehearsals
- Performance
- Technical Studies
- Study of Music

CHORUS

Credit: 0.25/0.50
Level: Grades 9, 10, 11, 12 **Weight:** Pass/Fail
Prerequisites: None

Textbook: None

Instructional Materials: Hymnals, Printed Sheet Music

Course Rationale and Description: Chorus Class meets every other day and provides students the opportunity to develop their singing skills. Students select, prepare, and perform the music for our Weekly Mass. In addition to this, students perform a Christmas Concert and a Spring Concert, in

conjunction with our High School Band and Elementary Band.

Course Topics:
Rehearsal Techniques, Performance Techniques, Vocal Skills, Ensemble Skills, Reading Vocal Music

Additional Activities:
During the school year, we are asked to participate in several school-related activities, including the annual Golden Grads Mass and the National Honor Society Induction Mass.

DEPARTMENT: HEALTH / PHYS. ED. / DRIVERS ED

PHYSICAL EDUCATION 9 AND 10

Credit 0.5
Weight: 0.5

Level: Grade 9, 10
Prerequisites: None
Note: *Physical Education is typically scheduled in grades 9 and 10. However, students have the option of completing their phys. ed. credits as juniors or seniors*

Textbook: None
Instructional Materials: P.E. Equipment, Gym Uniform

Course Rationale and Description: Physical Education provides a relaxed atmosphere in which students can become involved in physical activity as well as personal growth and development on their own level of ability. Throughout the year the co-educational program will place emphasis on coordination, development, skill, technique, participation, rules, and regulations of various lifetime and team sports. When necessary, individual adjustments are made for physical; limitations and medical excuses, with each situation reviewed separately.

Course Topics:
Soccer and flag football
Basketball
Hockey
Volleyball, badminton, table tennis
Baseball/Softball
Kickball and Dodgeball
Frisbee Football

HEALTH 9 AND 10

Credit: 0.5
Weight: 0.5

Level: Grade 9, 10
Prerequisites: None
Note: *Health is typically scheduled in grades 9 and 10. However, students have the option of completing their health credits as juniors or seniors*

Textbook: *Glencoe Health (2011*), American Red Cross First Aid and CPR Manuals
Instructional Materials: Textbook, PowerPoint, Lecture, Videos, Homework, Assignments

Course Rationale and Description: Teen Health develops a basic understanding of the human mind and the human body, its structure and function. Students are encouraged to explore and examine health related topics that are relevant to the twentieth century man. This course will provide students with a basic understanding of the relationship among the physical, mental, and spiritual well being. Included in a sophomore course will be certified and first aid and CPR.

Course Topics:
Structure, function, disorder and maintenance of body systems
Skeletal, muscular and nervous systems
Cardiovascular and respiratory systems
Skin, eyes, ears
Digestive and excretory systems
Endocrine and reproductive systems

Additional Activities: Lecture, discussion, PowerPoint, reading comprehension and supporting assignments, videos, diagrams, models, certification in first aid and CPR.

ELECTIVE PHYSICAL EDUCATION

Credit 0.5
Weight: 0.5

Level: Grade 12
Prerequisites: Only seniors having completed their 9th and 10th grade PE requirements may schedule this course

Textbook: None
Instructional Materials: P.E. Equipment, Gym Uniform

Course Rationale and Description: Physical Education provides a relaxed atmosphere in which students can become involved in physical activity as well as personal growth and development on their own level of ability. Throughout the year the co-educational program will place emphasis on coordination, development, skill, technique, participation, rules, and regulations of various lifetime and team sports. When necessary, individual adjustments are made for physical; limitations and medical excuses, with each situation reviewed separately.

Course Topics:
Soccer and flag football
Basketball
Hockey
Volleyball, badminton, table tennis
Baseball/Softball
Kickball and Dodgeball
Frisbee Football

CLASSROOM DRIVER'S EDUCATION

Credit: 0.33
Weight: 0.33

Level: Grade 10
Prerequisites: None

Textbook: *Drive Right*
Instructional Materials: Textbook, PA Drivers Manual, Internet Resources, Course Objectives, Videos, DVD's, IPAD, Brochures, PA Road Map,

Course Rationale and Description: The Driver Education program at Elk County Catholic High School strives to promote a genuine understanding of the enormous responsibility of operating a motor vehicle safely, efficiently, and courteously. Through a study of the Pennsylvania Drivers Manual, along with the text, Drive Right, students gain the knowledge necessary to complete the Pennsylvania driver's exam and become safe and responsible motor vehicle operators.

Each year, more than four million drivers under the age of twenty are involved in traffic accidents. This statistic represents almost one-third of the teenagers with licenses. Through a comprehensive program in "Driver and Traffic Safety" students will not only develop a proactive stance in the prevention of accidents, but also gain an understanding of their role as part of the Highway Transportation System. Elk County Catholic High School's comprehensive Driver's Education curriculum, along with sound and consistent reinforcement from the home environment, is an effective means of reducing the errors that lead to injury and death.

Course Topics: Restraint and Safety Systems; Permit and License Requirements; Rules, Regulations and Driving Laws; Basic Vehicle Control; Traffic Signs, Signals and Pavement Markings; Emergency Driving Skills; Reporting and Avoiding Accidents; Title, Registration, Insurance, and Inspection Concerns; Managing Driving Risk; Natural Laws and Car Control; Urban, Rural, Expressway, and Open Road Driving; Purchasing and Maintaining your Vehicle; Physical, Emotional, Mental, and Social Aspects of Driving.

Additional Activities: Safety Seminars including: Train Safety; Pedestrian Safety; Trip Planning; Vehicle Maintenance; Drug and Alcohol Awareness; Consequences of Underage Drinking and Underage Drinking and Driving; Young Drivers at Risk; ABS; Attitude and Driving; History of the Automobile; Dangers of Vehicle Alterations; Car Theft; Distracted Driving Including Cell Phone Dangers; Road Construction Issue; Responsibilities in Construction Zones; Road Rage and the Psychology of Driving; Motorcycle Safety; Bicycle and Pedestrian Safety.

DEPARTMENT: FOREIGN LANGUAGE

LATIN I

Credit: 1.00
Level: Grades 9, 10, 11,12 **Weight:** 1.00
Prerequisites: *Recommendation of Language Arts Teacher, students who receive Language Arts Accommodations may not take language courses without school approval*

Instructional Materials: This is an online course taken through Imagine Learning

Course Rationale and Description:
High school students begin their introduction to Latin with fundamental building blocks in four key areas of foreign language study:

- listening comprehension,
- speaking
- reading
- writing

Each unit consists of a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, cultural presentations covering significant aspects of Roman culture or their modern-day manifestations, and assessments.

LATIN II

Credit: 1.0
Level: Grades 10, 11, 12 **Weight:** 1.0
Prerequisites: Grade of 80% or higher in Latin I

Instructional Materials: This is an online course taken through Imagine Learning

Course Rationale and Description:
Students continue their introduction to high school Latin by continuing to cover the fundamental building blocks in four key areas of foreign language study:

- listening comprehension
- speaking
- reading
- writing.

Each unit consists of a new vocabulary theme and grammar
concept, a notable ancient myth in Latin, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, cultural presentations covering significant aspects of Roman culture or their modern-day manifestations, and assessments.

FRENCH I

Credit: 1.0
Level: Grades 9, 10, 11, 12 **Weight:** 1.0

Instructional Materials: This is an online course taken through Imagine Learning

Course Rationale and Description:
Students continue their introduction to high school French by continuing to cover the fundamental building blocks in four key areas of foreign language study:

- listening comprehension
- speaking
- reading
- writing.

Each unit consists of an ongoing adventure story, a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and multimedia cultural presentations covering major French-speaking areas in Europe and across the globe

SPANISH I

Credit: 1.00
Level: Grades 9, 10, 11, 12 **Weight:** 1.00
Prerequisites: *Recommendation of Language Arts Teacher, students who receive Language Arts Academic Accommodations may not take language courses without school approval*

Textbook: *Realidades 1*
Instructional Materials: Textbook, videos, handouts, CDs, online learning tools such as conjuguemos.com and quizlet.com, games, realia

Course Rationale and Description: This course will help students develop their listening, speaking, reading and writing skills within the five standards of Foreign Language Learning: Communication, Culture, Connections, Comparisons and Communities. Vocabulary and grammar are presented and practiced in meaningful contexts that connect to real-life situations and experiences. In addition, a different cultural theme is presented in each chapter that will delve into the why behind the highlighted product and/or practice. Finally, students will look at comparisons between English and Spanish as well as see how to use Spanish beyond the classroom. Instructional activities will includeoral and written projects, listening exercises, paired oral practice, worksheets, games, and teacher- directed activities.

Course Topics:

- Greetings, introductions, leave-takings
- Numbers, time, body parts
- Classroom items, dates, weather, seasons
- Activities and expressions for saying what you like and don't like to do
- How to ask about and describe someone's personality
- Parts of the classroom; prepositions of location
- Foods, beverages; expressions to show surprise and discuss health
- Expressions to discuss preferences, agreement, disagreement, and quantity

- Leisure activities; places and feelings
- Expressions to tell where and with whom you go
- Expressions to talk about when things are done
- Expressions for extending, accepting, and declining invitations
- Expressions to tell when something happens
- Family and parties
- Describing people and ordering a meal

Additional Activities:
Christmas caroling, Cinco de Mayo celebration

SPANISH II

Credit: 1.00
Weight 1.00

Level: Grades 9, 10, 11, 12
Prerequisites: Grade of 80% or better in Spanish 1

Textbook: *Realidades 1, 2*
Instructional Materials: Textbook, videos, handouts, CDs, online learning tools such as conjuguemos.com and quizlet.com, games, realia

Course Rationale and Description: This course will help students further develop their listening, speaking, reading and writing skills within the five standards of Foreign Language Learning: Communication, Culture, Connections, Comparisons and Communities. The themes from Realidades
1 are revisited in depth for review and reteaching, which will help students expand their vocabulary, grammar, and cultural understanding. Vocabulary and grammar are presented and practiced in
meaningful contexts that connect to real-life situations and experiences. In addition, a different cultural theme is presented in each chapter that will introduce students to cultural products and perspectives of the Spanish-speaking world. Finally, students will look at comparisons between English
and Spanish as well as see how to use Spanish beyond the classroom. Instructional activities will include oral and written projects, listening exercises, paired oral practice, worksheets, games, and teacher-directed activities.

Course Topics:
- Classroom activities and rules; extracurricular activities;
- Affirmative and negative words
- Making comparisons
- Daily routines, getting ready for an event
- Shopping vocabulary, prices, money, locations in a downtown
- The preterite tense
- Driving terms; modes of transportation
- Direct and indirect object pronouns
- Affirmative commands

Additional Activities:

Day of the Dead ofrendas, Christmas caroling, Foreign Language Day competition, Cinco de Mayo celebration

SPANISH III

Credit: 1.00
Level: Grades 10, 11, 12 **Weight:** 1.02
Prerequisites: An average of 85% or better in Spanish II

Textbook: *Realidades 2, 3*
Instructional Materials: Textbook, videos, handouts, CDs, online learning tools such as conjuguemos.com and quizlet.com, games, realia

Course Rationale and Description: The focus of the year is to communicate comfortably in Spanish. They will further develop their abilities in listening, speaking, reading and writing skills and work toward demonstrating all of the first and second year outcomes at a level of reading/writing/speaking/listening comfort and ease, including some idiomatic usage; be able to read and listen to authentic texts for understanding; be able to communicate in writing and speaking at a level understandable to native speakers who are familiar with non-native speakers. The themes
at this level integrate more extensive vocabulary groups and a thorough presentation of grammar. Vocabulary and grammar are presented and practiced in meaningful contexts that connect to real-
life situations and experiences. Instructional activities will include oral and written projects, listening exercises, paired oral practice, worksheets, games, and teacher-directed activities.

Course Topics:

- Camping, athletic events and other competitions
- Past, future, conditional, perfect and subjunctive tenses
- The arts and theater
- Commands
- Health, nutrition and physical fitness

Additional Activities:
Day of the Dead ofrendas, Christmas caroling, Foreign Language Day competition, Cinco de Mayo celebration

SPANISH IV

Credit: 1.00
Level: Grades 11, 12 **Weight:** 1.02
Prerequisites: An average of 85% or better in Spanish 3; Recommendation of Spanish 3 teacher.

Textbook: Realidades 3, Abriendo Paso
Instructional Materials: Textbook, videos, handouts, online learning tools, web sites, realia

Course Rationale and Description: Spanish 4 is a continuation of Spanish 3. It is designed to continue the process of developing the student's skill in using the Spanish language, concentrating on reading, writing, speaking and thinking in Spanish. At this level students will be expected to use more high- level vocabulary and idioms and grammar. Vocabulary and grammar are presented and practiced in meaningful contexts that connect to real-life situations and experiences. Instructional activities will include oral and written projects, listening exercises, worksheets, games, writing prompts, etc.

Course Topics:

- A review of grammar presented in Spanish 1-3;
- Any grammar not previously covered
- Assignments driven by current events, readings, and society

Additional Activities:
Day of the Dead ofrendas, Christmas caroling, Foreign Language Day competition, Cinco de Mayo celebration

SPANISH V

Credit: 1.00
Level: Grade 12 **Weight:** 1.02
Prerequisites: An average of 85% or better in Spanish 4; Recommendation of Spanish 4 teacher.

Textbook: Realidades 3, Abriendo Paso
Instructional Materials: Textbook, videos, handouts, online learning tools, web sites, realia

Course Rationale and Description: Spanish 5 is a continuation of Spanish 4. It includes a review of grammar, short stories, novels, oral presentations and writing papers. It is designed to continue the process of developing the student's skill in using the Spanish language, concentrating on reading, writing, speaking and thinking in Spanish. At this level students will be expected to use more
extensive, high-level vocabulary and idioms and grammar. Vocabulary and grammar are presented and practiced in meaningful contexts that connect to real-life situations and experiences. Instructional activities will include oral and written projects, listening exercises, worksheets, games, writing prompts, etc.

Course Topics:
- A review of grammar presented in Spanish I-IV;
- Any grammar not previously covered
- Assignments driven by current events, readings, and society

Additional Activities:
Day of the Dead ofrendas, Christmas caroling, Foreign Language Day competition, Cinco de Mayo celebration

AP SPANISH LANGUAGE AND CULTURE

Credit: 1.00
Level: Grades 11, 12 **Weight:** 1.10
Prerequisites: An average of 90% or better in Spanish 3,4; Recommendation of Spanish teacher.

Textbook: *Realidades 3, Abriendo Paso*
Instructional Materials: Textbook, videos, handouts, online learning tools, web sites, realia

Course Description: Inasmuch as this course is designed to help students develop strong language skills, Spanish will be used almost exclusively, and class participation grades will reflect this. The course's thematic approach will allow students to demonstrate proficiency in the Intermediate to Pre-Advanced range in all three modes of communication - Interpretive, Interpersonal and Presentational - as well as learn about culture throughout the Spanish-speaking world. This is in turn will enable them to communicate effectively in Spanish-speaking environments.

Course Topics:
AP thematic units covered:

Las Familias y las Comunidades
La Ciencia y la Tecnología

La Belleza y la Estética
La Vida Contemporánea
Los Desafíos Mundiales
Las Identidades Personales y Públicas

Each unit is based on recommended contexts and guided by essential questions. Cultural elements are integrated into this course as well as the review of advanced language structures within the contextual framework of each unit as needed as well as any grammar not previously covered.

Additional Activities:
Day of the Dead ofrendas, Christmas caroling, Foreign Language Day competition, Cinco de Mayo celebration

DEPARTMENT: MATHEMATICS

ALGEBRA IB

Credit: 1.00
Weight: 1.00

Level: Grade 9
Prerequisites: Successful completion of Algebra IA

Textbook: *envision Algebra I*
Instructional Materials: books, handouts

Course Rationale and Description: Algebra I is the first formal introduction to logical expressions of ideas using variables. In this course, students will expand upon the topics learned in Algebra IA, including equations, inequalities, and linear functions. Emphasis will be placed on the exploration of other various functions, including absolute value, piecewise, and exponential functions as well as explorations in quadratics.

Course Topics:
1. Systems of Linear Equations
2. Systems of Linear Inequalities
3. Piecewise Functions
4. Exponents & Exponential Functions
5. Polynomials
6. Factoring

GEOMETRIC MATH

Credit: 1.00
Weight: 1.00

Level: Grades 9, 10, 11, 12
Prerequisites: Successful completion of Algebra I

Textbook: *envision Geometry*
Instructional Materials: book, handouts

Course Rationale and Description:
Geometric Math stresses the deductive approach to gaining knowledge. Students utilize both intuitive and inductive reasoning processes. Problem solving techniques introduced through the course are a basis for competency in other mathematic courses.

Course Topics:
1. Points, lines, planes and angles
2. Perpendicular lines
3. Parallel lines
4. Congruent triangles
5. Quadrilaterals
6. Right triangles
7. Circles
8. Similar triangles
9. Formulas

Additional Activities:
Projects with direct application.

GEOMETRY

Credit: 1.00
Level: Grades 9, 10, 11, 12 **Weight:** 1.00
Prerequisites: Successful completion of Algebra I

Textbook: *envision Geometry*
Instructional Materials: books, handouts

Course Rationale and Description:
Geometry stresses the deductive approach to gaining knowledge. Students develop both intuitive and inductive reasoning skills. Proofs and problem solving techniques are introduced through the course that are the basis for competency in other math courses.

Course Topics:
1. Points, lines, planes
2. Reasoning and proofs
3. Parallel and perpendicular lines
4. Congruent triangles and triangle relationships
5. Quadrilaterals
6. Right triangles and trigonometry
7. Circles

Additional Activities:
Projects with direct application.

SAT MATH

Credit: 0.33
Level: Grade 10 **Weight** 0.33
Prerequisites: None

Textbook:
Instructional Materials: books, handouts, calculators

Course Description: This class is designed to prepare students for the math section of the SAT. In addition to reviewing topics from pre-algebra, algebra, and geometry, students will become familiar with the format of the test and learn strategies. Much time will be devoted to practice problems similar to those on the SAT

ALGEBRA II

Credit: 1.00
Level: Grades 9, 10, 11, 12 **Weight:** 1.00
Prerequisites: Successful completion of Algebra I

Textbook: *envision Algebra II*
Instructional Materials: Textbook

Course Rationale and Description: Algebra II is intended to enlarge students' foundation in the language and science of algebra. This course provides students with the opportunity to further their

interests and abilities as they prepare for higher-level mathematics courses. Increased emphasis is placed on the deductive reasoning process.

Course Topics:

- Real Number System
- Basic functions
- Solving, graphing, and analyzing linear equations and inequalities
- Solving, graphing, and analyzing systems of linear equations and inequalities
- Solving quadratic equations
- Exponents and their properties (positive and negative)
- Higher-order factoring
- Complex Numbers and their operations
- Radicals and their operations
- Rational expressions and their operations

PRECALCULUS

Credit: 1.00
Level: Grades 10, 11, 12 **Weight:** 1.02

Prerequisites: Students must meet at least 2 of the following requirements for admission into the class:

A. Teacher recommendation
B. 80% or better in Algebra II
C. 60th percentile score on math standardized testing

Note: *Can be taken concurrently with Geometry*

Textbook: *Precalculus*: Third Edition (Larson and Hostettler)
Instructional Materials: Textbook, worksheets, handouts, scientific calculators, graphing calculators, ipad apps, computer apps, internet, Khan Academy

Course Rationale and Description: The primary purpose of Precalculus is to prepare students for the study of Calculus – either in high school or beyond – or to give students a more robust problem solving pallet. It reinforces and builds upon the algebraic principles they have encountered in previous courses with particular emphasis on understanding and analyzing the correspondences between equations, verbal descriptions, tables, and graphs; the definitions, algebra, and application of the trigonometric functions and their fundamental identities; mathematical modeling with linear, quadratic, exponential, logarithmic, polynomial, and rational functions; and sequences and sums.

Course Topics:
Algebra – rational exponents, logarithms, binomial expansion, polynomial division
Functions – domain, range, increasing, decreasing, linear, quadratic, polynomial, exponential, logarithmic, rational, graphing, modeling
Sequences and Sums – arithmetic, geometric, Fibonacci, factorial

Additional Activities: Lecture, discussion, discovery, board work, projects

CALCULUS

Credit: 1.00
Level: Grades 11, 12 **Weight:** 1.02
Prerequisites: Students must meet at least 2 of the following requirements for admission into the class:
A. Teacher recommendation
B. 80% or better in Pre-calculus
C. 60th percentile score on math standardized testing

Textbook: *Calculus 7th Edition*, Larson, Hostetlar & Edwards
Instructional Materials: Textbook, Graphing Calculator,

Course Rationale and Description:
The Calculus course is designed to develop skills and concepts of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions

Course Topics:

- Limits
- Continuity
- Differentiation and some basic Applications
- Integration (including the Fundamental Theorem of Calculus) and some basic Applications

AP CALCULUS AB (Dual Enrollment)

Credit: 1.00
Level: Grades 11, 12 **Weight:** 1.06/1.10
Prerequisites: Students must meet at least 2 of the following requirements for admission into the class:
A. Teacher recommendation
B. 86% or better in Pre-calculus
C. 70th percentile score on math standardized testing

Textbook: *Calculus 7th Edition*, Larson, Hostetler & Edwards
Instructional Materials: Textbook, Graphing Calculator, iPad

Course Rationale and Description:
The AP Calculus AB course is designed to develop skills and concepts of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions

Course Topics:
- Limits
- Continuity
- Differentiation and its Applications
- Integration (including the Fundamental Theorem of Calculus) and its Applications

AP CALCULUS BC (Dual Enrollment)

Credit: 1.00
Level: Grade 12
Weight: 1.06 / 1.10
Prerequisites: Students must meet at least 2 of the following requirements for admission into the class:

A. Teacher recommendation
B. 86% or better in AP Calc AB
C. 70th percentile score on math standardized testing

Textbook: *Calculus 8th Edition,* Larson, Hostetler Edwards,
Instructional Materials: Textbook, handouts, and video

Course Rationale and Description:
The AP Calculus BC is designed to develop students understanding of limits, derivatives, integrations, applications, sequences and series, conics and polar coordinate, and vectors. Application of said content and real life examples to hone in on necessary to skill to be better problem solvers and critical thinkers.

Course Topics:

- Limits
- Derivative and its applications
- Integration and its applications
- Logarithmic Functions, Exponents, and Other Transcendental Functions
- Differential Equations
- Integration Techniques
- Infinite Series
- Conics, Parametrics, and Polar Coordinates
- Vectors and Geometry of Space

Additional Activities: Projects with direct application, Field Trips, AP Calculus BC Test practical

CAREER MATH

Credit: 1.0
Level: Grades 11 & 12
Weight: 1.0
Prerequisites: Successful completion of Algebra I and Geometry
Note: *Career Math is offered every other year*

Textbook: *Southwestern Practical Math Application*
Instructional Materials: book, handouts

Course Rationale and Description:
Ideas and concepts are taught that will enable students to be competent consumers in tomorrow's workplace. Activities such as applying for a job, buying and maintaining a car and home, completing tax returns and investing give students a sense of what math is necessary in life.

Course Topics:

- Operations on real numbers
- Fractions
- Percent
- Bank services
- Payroll
- Taxes
- Insurance
- Discounts

- Markups
- Interest
- Credit
- Mortgages

Additional Activities:
Projects with direct applications.

COLLEGE ALGEBRA

Credit: 1.00
Weight: 1.00

Level: Grades 11, 12
Prerequisites: Successful completion of Algebra II

Textbook: *Blitzer Algebra for College Students*
Instructional Materials: Textbook, worksheets, handouts, scientific calculators, graphing calculators, computer apps, internet, Khan Academy

Course Rationale and Description: College Algebra is a course for those students who wish to take a higher level mathematics course but do not wish to take the Analysis/Calculus track. College Algebra is intended to extend the Algebra II concepts, introduce students to logarithmic, exponential, rational and polynomial functions and prepare students for Algebra on the college or technical school level. Course Topics: Trigonometry, Linear Equations and Functions, Linear Systems, Inequalities, Factoring and Polynomial Functions, Rational Expressions, Integral and Rational Exponents, Radicals, Quadratic Equations and Functions, Exponential and Logarithmic Functions

Additional Activities: Lecture, discussion, discovery, board work, projects

INTEGRATED MATH FOUNDATIONS

Credit: 1.00
Weight: 1.00

Level: Grade 10, 11,12
Prerequisites: Successful completion of Algebra I, Geometry

Textbook: enVision Integrated Math
Instructional Materials: books, handouts

Course Rationale and Description:
Ideas and concepts from algebra and geometry are used to develop good mathematical practices and processes. Problem solving, reasoning skills, making connections between real world situations and generalizing mathematical principles from patterns are explored to help students become proficient math thinkers.

Course Topics:
- Solving equations and inequalities
- Linear equations and their graphs
- Systems of linear equations and inequalities
- Exponent and exponential functions
- Foundations of geometry
- Parallel and perpendicular lines
- Transformations

Additional Activities:
Projects with direct application.

INTEGRATED MATH

Credit: 1.00
Level: Grade 11,12 **Weight:** 1.00
Prerequisites: Successful completion of Algebra I, Geometry Algebra II or Integrated Math Foundations

Textbook: enVision Integrated Math II
Instructional Materials: books, handouts

Course Rationale and Description:
Ideas and concepts from algebra and geometry are interwoven in Integrated Math. Timely and interesting situation put math into perspective. Applications, with a strong visual-verbal link, help students see how math is a real part of their world.

Course Topics:
- Mathematics and number sense
- Operations on the real number system
- Reasoning in geometry
- Statistics
- Solving equations and inequalities
- Using formulas
- Polynomials
- Graphing
- Slope and systems
- Ratio and proportions

Additional Activities:
Projects with direct application.

STATISTICS (Dual Enrollment)

Credit: 1.00
Level: Grades 11, 12 **Weight:** 1.06
Prerequisites: Students must meet at least 2 of the following requirements for admission into the class:
A. Teacher recommendation
B. 86% or better in Algebra II
C. Concurrently taking or completion of pre-calculus

Textbook: *Elementary Statistics (4th edition).*
Instructional Materials: Textbook, TI-84 Plus

Course Rationale and Description: Statistics is a course that explains how data is collected, how data is manipulated, and how it is put to use. Modern statistics is involved in almost every aspect of our daily lives. Statistical principles are used in many areas of business, education, and industry. Students will develop the ability to analyze data and develop useful informationfrom it. An introduction to the principles of probability will also be included in this course.

Course Topics: Introduction to statistics, descriptive statistics, probability, discrete probability distributions, normal probability distributions, confidence intervals, correlations and regressions.

TRIGONOMETRY

Credit: 0.50
Level: Grades 10, 11, 12
Weight: 1.0

Prerequisites:
A. Successful completion of Geometry & Algebra II
B. Concurrently taking or completion of College Algebra or Pre-Calculus

Textbook: Trigonometry Fourth Edition, Larson & Hostetler

Instructional Materials: Textbook, scientific calculator

Course Rationale and Description: Trigonometry is an elective mathematics course that, used with algebraic and geometric skills, explores the relationships among sides and angles of triangles. A firm foundation in trigonometry is necessary for success in college-level mathematics courses. Skills learned in trigonometry will be applied in other courses, such as Calculus and Physics.

Course Topics:
1. Trigonometric Functions
2. Angles & Angle Measure
3. The Unit Circle
4. Graphing Trigonometric Functions
5. Trigonometric Identities
6. Solving Trigonometric Equations

DEPARTMENT: SCIENCE

PRINCIPLES OF BIOLOGY

Credit: 1.00
Level: Grade 9 **Weight:** 1.00
Prerequisites: 1. Successful completion of middle school science.
2. Recommendation of the middle school science teacher
3. Student who in the past has received academic accommodations or has class grades and/or standardized test scores that would indicate the need for specialized instruction.

NOTE: Students who are planning to enroll in advanced coursework as a 9th grader, may not schedule this course. This course does not serve as a pre-requisite for Advanced, AP or Dual Enrollment Coursework at ECC.

Textbook: *TBA*
Instructional Materials: Lectures, group work, laboratory investigations, independent study, projects, videos, POGIL (Process Oriented Guided Inquiry Learning), and other similar type assignments.

Course Rationale and Description:
Principles of Biology fulfills a portion of the science requirements required for graduation from Elk County Catholic High. This course is designed for students who in the past have received academic accommodations or have classroom graders or standardized test scores that would require specialized instruction. This course provides the student with an overview of the cellular basis of life, molecular biology, cell energetics, cell biology, genetics, differentiation, taxonomy, ecology and interdependence between plant and animal kingdoms.

Course Topics:

*Science of Biology
*Chemistry of Life
*Biosphere
*Ecosystems and Communities
*Cell Structure and Function
*Photosynthesis
*Cellular Respiration and Fermentation
*Cell Growth and Division
*Introduction to Genetics
*DNA
*RNA and Protein Synthesis
*Genetic Engineering
*Protists and Fungi
*Human Heredity
*Classification
*History of Life
*Introduction to Plants
*Plant Structure and Function
*Plant Reproduction and Response
*Endocrine and Reproductive Systems
*Animal Behavior
*Viruses and Prokaryotes

Additional Activities:
We emphasize hands on laboratory activities in this class.

BIOLOGY I

Credit: 1.00
Level: Grade 9 **Weight:** 1.00
Prerequisites: Successful completion of middle school science.

Textbook: *Biology, Miller and Levine, Prentice Hall, 2014*.
Instructional Materials: Lectures, group work, laboratory investigations, independent study, projects, videos, POGIL (Process Oriented Guided Inquiry Learning), and other similar type assignments.

Course Rationale and Description:

Biology I fulfills a portion of the science requirements required for graduation from Elk County Catholic High school and is required for graduation. The course focuses on basic science skills and information required by many post-secondary programs for admission. This course provides the student with an overview of the cellular basis of life, molecular biology, cell energetics, cell biology, genetics, differentiation, taxonomy, ecology and interdependence between plant and animal kingdoms.

Course Topics:

*Science of Biology
*Chemistry of Life
*Biosphere
*Ecosystems and Communities
*Cell Structure and Function
*Photosynthesis
*Cellular Respiration and Fermentation
*Cell Growth and Division
*Introduction to Genetics
*DNA
*RNA and Protein Synthesis
*Genetic Engineering
*Protists and Fungi
*Human Heredity
*Classification
*History of Life
*Introduction to Plants
*Plant Structure and Function
*Plant Reproduction and Response
*Endocrine and Reproductive Systems
*Animal Behavior
*Viruses and Prokaryotes

Additional Activities:
We emphasize hands on laboratory activities in this class.

ACCELERATED BIOLOGY I

Credit: 1.00
Level: Freshman **Weight:** 1.02
Prerequisites: Successful completion of middle school science, recommendation of teachers.

Textbook: *Biology,* Miller and Levine, Prentice Hall, 2014.
Instructional Materials: Lectures, group work, laboratory investigations, independent study, projects, videos, POGIL (Process Oriented Guided Inquiry Learning), and other similar type assignments.

Course Rationale and Description:
Accelerated Biology I fulfills a portion of the science requirements required for graduation from Elk County Catholic High school and is required for graduation. The course focuses on basic science skills and information required by many post-secondary programs for admission This course provides the student with an overview of the cellular basis of life, molecular biology, cell energetics, cell biology, genetics, differentiation, taxonomy, ecology and interdependence between plant and animal kingdoms.

Course Topics:

*Science of Biology
*Chemistry of Life
*Biosphere
*Ecosystems and Communities
*Cell Structure and Function
*Photosynthesis
*Cellular Respiration and Fermentation
*Cell Growth and Division
*Introduction to Genetics
*DNA
*RNA and Protein Synthesis
*Genetic Engineering
*Protists and Fungi
*Human Heredity
*Classification
*History of Life
*Introduction to Plants
*Plant Structure and Function
*Plant Reproduction and Response
*Endocrine and Reproductive Systems
*Animal Behavior
*Viruses and Prokaryotes

Additional Activities:
We emphasize hands on laboratory activities in this class. As this class is accelerated, we will concentrate heavily on additional reading and writing assignments. Students will learn the Cornell
Note Taking System. Students may be exposed to additional/advanced laboratories.

APPLICATIONS OF CHEMISTRY

Credit: 1.00
Level: Grade 10 **Weight:** 1.00
Prerequisites: Science Requirement: Successful completion of Principles of Biology or Biology 1 or recommendation of Biology Teacher

Textbook: *Chemistry Matter and Change,* McGraw Hill Glencoe Series, 2005. Instructional Materials: Textbook, handouts, videos, and labs

Course Rationale and Description:
This course is designed for students who in the past have received academic accommodations or have classroom grades or standardized test scores that would require specialized instruction. This course will provide an overview of the following topics:

Course Topics:
- Matter
- Atomic Structure and Periodic Table
- Stoichiometry
- Particle Behavior of Matter- Electrons
- Ionic and Covalent Bonding
- The Mole
- Solutions
- Gases
- Equilibrium
- Chemical Reactions
- Molecular Geometry
- Properties of Water and Its Solutions
- Electrochemistry
- Organic Chemistry
- Nuclear Chemistry

Additional Activities: Application of practical examples which could include any of the following: Labs & Field Trips

CHEMISTRY

Credit: 1.00
Level: Grade 10 **Weight:** 1.00
Prerequisites: Science Requirement: Successful completion of Biology 1 or recommendation of Biology Teacher Math Requirement: 86% or better in Algebra 1 or successful completion of Algebra 2 or taking concurrently

Textbook: *Chemistry Matter and Change,* McGraw Hill Glencoe Series, 2005. Instructional Materials: Textbook, handouts, videos, and labs

Course Rationale and Description:

The course is designed for students to acquire a basic understanding of the organization of matter, atomic and molecular structure, chemical bonding and stoichiometry. Expectations include writing
and balancing chemical equation and utilizing scientific laws to solve problems.

Course Topics:

- Matter
- Atomic Structure and Periodic Table
- Stoichiometry
- Particle Behavior of Matter- Electrons
- Ionic and Covalent Bonding
- The Mole
- Solutions
- Gases
- Equilibrium
- Chemical Reactions
- Molecular Geometry
- Properties of Water and Its Solutions
- Electrochemistry
- Organic Chemistry
- Nuclear Chemistry

Additional Activities: Application of practical examples which could include any of the following: Labs & Field Trips

CHEMISTRY II

Credit: 1.00
Level: Grade 11, 12 **Weight:** 1.02
Prerequisites: Science Requirement: 86% or better in Chemistry 1 or recommendation of Chemistry 1 Teacher Math Requirement:

Textbook: *Organic and Biochemistry Connecting Chemistry to Your Life, Blei and Odian, W.H. Freeman and Company 2000.*
Instructional Materials: Textbook, handouts, videos, and labs

Course Rationale and Description:

The course is designed for students interested in careers in chemistry, forensics, medicine, biochemistry, or engineering. Topics covered include the structures, reactions, and uses of all the major families of functional groups, as well, as carbohydrates, lipids, proteins, nucleic acids, metabolism, and hormones.

Course Topics:

- Bonding and Isomerism
- Alkanes
- Alkenes and Alkynes
- Aromatics
- Stereoisomerism
- Organic Halogen Compounds
- Alcohols, Phenols, and Thiols
- Ethers and Epoxides
- Aldehydes and Ketones
- Carboxylic Acids

- Amines and Amides
- Spectroscopy and Structure
- Heterocyclic Compounds
- Carbohydrates
- Lipids
- Amino Acids and Proteins

Additional Activities:
Application of practical examples which could include any of the following: Labs, Field Trips

PHYSICAL SCIENCE

Credit: 1.00
Weight: 1.00

Level: Grade 11, 12
Prerequisites: A). Satisfactory completion of Algebra I.
B). Satisfactory completion of Biology I.

Textbook: *Physical Science (Holt)*
Instructional Materials: Textbook, chalkboard, lab instruction pages, calculators, videos.

Course Rationale and Description: Physical Science is designed to provide students with a basic understanding of principles that govern the workings of nature. Coverage will include motion, light, sound, electricity, and magnetism. Significant variation from Physics I will be in the depth of material covered and the mathematics prerequisites required.

Course Topics:

- Motion
- Forces & Newton's Laws
- Work & Energy
- Electricity
- Magnetism & Its Uses
- Introduction to Waves
- Sound
- Electromagnetic Waves
- Light
- Mirrors & Lenses

Additional Activities: Demonstration and lab materials

PHYSICS I

Credit: 1.00
Weight: 1.02

Level: Grade 11, 12
Prerequisites: A). Pre-Calculus, concurrently or in a prior year.
B). A grade of 86% or better in Chemistry I in a prior year.
C). Physics I may be taken concurrently with other science courses with the following exceptions: Physical Science, Physics II, Chemistry I and its prerequisites.

Textbook: College Physics 4th Edition, Knight, Jones, & Field

Instructional Materials: Textbook, lab and demonstration materials, lab instruction outlines, calculators.

Course Rationale and Description: This course studies the fundamental laws of nature on which all science is based. It is designed to enable students to appreciate the role of physics in today's

society and technology. Physics is the study of matter and its motion through space and time, along with related concepts such as energy and force.

Course Topics:

- Motion in One Dimension
- Vectors & Motion in Two Dimensions
- Forces & Newton's Laws
- Circular Motion, Orbits, & Gravity
- Rotational Motion
- Equilibrium & Elasticity
- Momentum
- Energy & Work
- Thermal Properties of Matter

Additional Activities: Demonstrations and lab experiments.

PHYSICS II

(Dual Enrollment) **Credit:** 1.00

Level: Grade 12 **Weight:** 1.02

Prerequisites: Grade of 86% or better in Physics I. May be taken concurrently with other science courses with the following exceptions: Physical Science, Physics I, Chemistry I and its prerequisites.

Textbook: College Physics 4th Edition, Knight, Jones, & Field
Instructional Materials: Textbook, calculators, lab and demonstration materials.

Course Rationale and Description: Physics II builds upon the concepts learned in Physics I with the addition of topics in waves, electricity, and modern physics.

Course Topics:

- Oscillations
- Traveling Waves & Sound
- Superposition & Standing Waves
- Wave Optics
- Ray Optics
- Optical Instruments
- Electric Fields & Forces
- Electrical Potential
- Current & Resistance
- Circuits
- Topics in Modern Physics

Additional Activities: Demonstration and lab experiments.

HUMAN ANATOMY AND PHYSIOLOGY

Credit: 1.00

(Dual Enrollment)

Level: Grade 11,12 **Weight:** 1.06

Prerequisites: A.) Biology I
B.) Chemistry I
C.) Recommendation of science department

D.) 70th percentile score on standardized testing

Textbook: *Anthony's Textbook of Anatomy and Physiology, Seventeenth Edition, Thibodeau and Patton, Mosby-Yearbook, 2003.*
Anthony's Textbook of Anatomy and Physiology Laboratory Manual, Thibodeau and Patton, Mosby-Yearbook, 2002.
Instructional Materials: Lectures, group work, laboratory investigation, independent study, lab practicals, videos, and other outside assignments.

Course Rationale and Description:
This course provides an intensive study of the subject of Human Anatomy and Physiology. As and advanced, college level course it requires more independent study and problem solving on the part of each enrolled student.
Human Anatomy and Physiology is an elective science course designed for those students who are considering a career in the medical fields. It is available as a dual enrollment college course through
Mt. Aloysius College. Human Anatomy and Physiology also fulfills a science graduation requirement for Elk County Catholic High School.

Course Topics:

*Medical terminology
*Directional terminology
*Chemistry review
*Cells
*Tissues
*Skin
*Appendages
*Skeletal system
*Muscular system
*Nervous system
*Cardiovascular system
* Respiratory system
*Immune system
*Endocrine system
*Lymphatic system
*Digestive system
*Urinary system
*Reproductive system

ENVIRONMENTAL SCIENCE

Credit: 1.00
Weight: 1.00

Level: Grade 11, 12
Prerequisites:
A. Biology I
B. Environmental Science may be taken concurrently with another science.
C. A student may NOT take Environmental Science after taking AP Environmental Science.

Textbook: *Environmental Science*, Withgott, Jay. Pearson 2011.
Instructional Materials: Lectures, case studies, group work, laboratory investigations, independent study, projects, videos, and other assignments as deemed necessary.

Course Rationale and Description:
Environmental science is a survey course designed to present a diversified and balanced picture of the environment. The emphasis in this course is on the student making informed decisions about the
environment and using real life applications to further their understanding of the world around them. It fulfills a portion of the science requirements required for graduation from Elk County Catholic High School and builds upon basic science skills required for admission to many post-secondary institutions.

Course Topics:

*Ozone Layer
*Forestry and Resource Management

*Easter Island
*Economics and Environmental Policy
*Matter
*Biogeochemical cycles
*Population ecology
*Community ecology
*Biomes and Aquatic ecosystems
*Biodiversity and conservation
*Human population
*Environmental health
*Urbanization
*Soil and Agriculture
*Mineral Resources and Mining
*Water Resources
*The Atmosphere
*Global Climate Change
*Nonrenewable Energy
*Renewable Energy Alternatives
*Waste Management

LAB ASSISTANT

Credit: 0.25/0.50
Weight: P/F

Level: Grade 11, 12
Prerequisites:
A. Biology I
B. Chemistry I
C. Upper level science course
D. Recommendation of science department

Textbook: None required
Instructional Materials: Laboratory materials as designated by instructor.

Course Rationale and Description: This course will enable the student to utilize laboratory skills learned in lower level science courses. The course involves preparing materials needed for Biology and Chemistry labs. The student is also responsible for inventory, cleanliness, and other duties as specified by the instructor.

Course Topics: Laboratory preparation, inventory, clean-up.

AP BIOLOGY (Dual Enrollment)

Credit: 1.00
Weight: 1.06/ 1.10

Level: Grade 11, 12
Prerequisites:
A. Biology I
B. Chemistry I
C. Recommendation of science department
D. 70th percentile score on standardized testing

Textbook: *Campbell, N.A and Reece, J.B. AP Biology 8th edition, Benjamin Cummins (2008)*
AP Biology Investigative Labs: An Inquiry-Based Approach by The College Board (2012)
Instructional Materials: Lectures, group work, laboratory investigation, independent study, lab practicals, videos, and other outside assignments.

Course Rationale and Description:
AP Biology is an elective course designed for those students who are considering a career in science, engineering, or health care. It requires more independent study and problem solving skill on the part
of the student.
AP Biology is an elective science course that is available as a dual enrollment course with Mt. Aloysius
College. AP Biology also fulfills a science graduation requirement for Elk County Catholic High School. This course requires extensive laboratory work. Students are required to spend twenty-five

percent of their class time in the lab, and as such are required to come to class one hour early one day per week.

Course Topics:
This course includes four big ideas that "encompass core scientific principles, theories, and processes governing living organisms and biological ecosystems." (The College Board, 2012)

- The process of evolution drives the diversity and unity of life.
- Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis.
- Living systems store, retrieve, transmit, and respond to information essential to life.
- Biological systems interact, and these systems and their interactions possess complex properties.

AP CHEMISTRY (Dual Enrollment)

Credit: 1.00
Level: Grade 11,12
Weight: 1.06/1.10

Prerequisites:
A. Science Requirement: 86% or better in Chemistry I
B. Math Requirement: 86% or better in Algebra II and concurrent with Pre-Calculus
C. 70th percentile score on standardized testing
D. Science Department Recommendation

Textbook: *Chemistry The Central Science 9th Edition Brown, LeMay, and Bursten*
Instructional Materials: Textbook, handouts, videos, and labs

Course Rationale and Description:
The course is designed to be an equivalent to a first year undergraduate general inorganic chemistry course. This course is based on seven scientific practices which include 1. Matter, 2. Bodning and
Intramolecular Forces, 3. Chemical Reactions, 4. Kinetics 5. Thermodynamics, 6. Chemical Equilibrium, and 7. Nuclear Chemistry

Course Topics:

- Matter and Measurement
- Atom, Molecules, and Ions
- Stoichiometry
- Aqueous Reactions and Solutions
- Thermochemistry
- Bonding
- Molecular Geometry
- Gases
- Intermolecular Forces Solids and Liquids
- Solutions
- Kinetics
- Equilibriums
- Thermodynamics
- Electrochemistry
- Nuclear Chemistry

Additional Activities: Application of practical examples which could include any of the following: Labs, Field Trips, AP Test practical

AP ENVIRONMENTAL SCIENCE

Credit: 1.00

(Dual Enrollment)

Level: Grade 11,12

Weight: 1.06/1.10

Prerequisites:
A. Biology I
B. Chemistry I
C. Recommendation of science department
D. 70th percentile score on standardized testing

Note: *AP Environmental Science is only offered alternate years.*

Textbooks: *Friedland, Andrew, Relyea, Rick, and Courard-Haurl, David Environmental Science for AP W.H. Freeman and Company (2012), McConnell, Robert L and Daniel C. Abel. Environmental Issues:*

An Introduction to Sustainability 3rd Edition, Pearson Prentice Hall (2008), Molnar, William. Laboratory Investigations AP Environmental Science, Peoples Education (2005)

Instructional Materials: Lectures, group work, laboratory investigation, independent study, videos, and other outside assignments.

DEPARTMENT: SOCIAL STUDIES

WESTERN CIVILIZATION I

Credit: 1.0
Weight: 1.0

Level: Grade 9
Prerequisites: None

Textbook: *WORLD HISTORY and GEOGRAPHY, McGraw-Hill, 2014*
Instructional Materials: Handouts, Textbook, Videos, researched topics

Course Rationale and Description: While fulfilling a graduation requirement, this course reviews important topics from ancient civilizations up to early Christianity and the fall of Rome. Special focus will be placed on ancient Greek and Roman civilizations as they directly influence our lives, customs, and language today. Students will also study and learn of the establishment of civilizations in Africa, India, South America, and China and how language, customs, religion, and ideas spread through travel and trade.

Course Topics:
- Learn the importance of past civilizations
- Identify elements of our society and its relationships to past civilizations
- Become knowledgeable of how our world has grown and changed
- Identify contributions that Greek freedom ideals and Roman law made on American democracy
- Describe the emergence of modern Western Civilization
- Understand what occurs when people with widely different heritages try to live with one another

WESTERN CIVILIZATION II

Credit: 1.0
Weight: 1.0

Level: Grade 10
Prerequisites: WESTERN CIVILIZATION I

Textbook: *WORLD HISTORY and GEOGRAPHY, McGraw-Hill, 2014*
Instructional Materials: Handouts, Textbook, Videos, researched topics

Course Rationale and Description: While fulfilling a graduation requirement, this course is a continuation from the content studied in Western Civilization I. This section focuses on important topics from Christianity up to World War II and the Cold War, 1962. Special focus will be placed on European Colonialism and Culture as they directly influence our lives, customs, and language today. Students will also study and learn of European colonialization in the 1600's and the spread of European colonialization up to 1914 and how language, customs, religion, and ideas spread through travel and trade.

Course Topics:
- Learn the importance of past civilizations
- Identify elements of our society and its relationships to past civilizations
- Become knowledgeable of how our world has grown and changed
- Identify contributions that Greek freedom ideals and Roman law made on American democracy
- Describe the emergence of modern Western Civilization
- Understand what occurs when people with widely different heritages try to live with one another

AMERICAN HISTORY

Credit: 1.0
Weight: 1.0

Level: Grade 11
Prerequisites: Western Civilization II

Textbook: *to be determined*
Instructional Materials: textbook, worksheets, DVDs, podcasts

Course rationale and description: Students will be instructed the history of the United States. American History is designed to give students an understanding of the United States in the Twentieth Century. American History is a required course.

Course topics :

- Civil War reconstruction
- Progressivism
- Government scandals
- Late 1800/early 1900 inventions
- The 27 Amendments
- Great Depression
- World War I / World War II / Korean Conflict
- Civil Rights in US
- Civil Liberties in the U.S. and the World
- Vietnam Conflict
- Presidential elections,
- Trade and Travel
- Recent events.

Additional activities: Students will complete News reports during the first, second, and third quarters. Students will also create poetry and diary entries of the Great Depression. Students will complete numerous written reports on current events, historical events, and other ideas we discuss. Lectures and projects are also part of this course.

ECONOMICS

Credit: 0.5
Weight : 0.5

Level : Grade 11,12
Prerequisites : None

Textbook: Economics : Principles and Practices, Glendon/McGraw-Hill
Instructional Materials: textbook, worksheets, DVDs, podcasts

Course Rationale and Description: This course will teach students about the basics of the Capitalism, and how the U.S. Trades with other countries. This course teaches students both Macroeconomic and Microeconomics.

Course topics :

- Demand
- Supply
- Decision Making
- Mergers
- Business Decisions
- Financial Markets

- Government Revenue
- Economic Systems
- Macroeconomics
- Microeconomics.

Additional Activities: Students will Peer Teach, write summaries about money/tech/recent articles, create Partnerships and present ideas, create mergers, and future economic aspects. Lectures and projects are also part of this course.

SOCIOLOGY

Credit: 0.5
Weight: 0.5

Level: Grade 11,12
Prerequisites: None

Textbook: Sociology and You McGraw-Hill 2014
Instructional Materials: Textbook, Videos, Power Points

Course Rationale and Description: The Sociology course is offered as an upper class semester elective. Sociology, allows students who are interested in people to examine human behavior patterns that occur in repeated and predictable ways. Group behavior patterns are presented with real life examples throughout the course. In addition, students will have the opportunity to probe the cause of human behavior patterns, and research major social problems of our time (instructor specific). An overall application to everyday life is emphasized throughout.

Course Topics:
- Social Structure and Society
- Groups and Formal Organizations
- Culture

Additional Activities:
Guest Speakers

AMERICAN POLITICAL BEHAVIOR

Credit: 0.5
Weight: 0.5

Level: Grade 12
Prerequisite: None

Textbook: *Magruder's American Government (2010)*
Instructional Materials: textbook, worksheets, DVDs, podcasts

Course Description and Rationale: American Political Behavior is a course designed to assist students understand the organization and the function of our government. Is stresses the need for civic understanding as well as an appreciation of the democratic process. This course will examine the foundations of our political system and explain how our constitution embodies the purposes, values, and principles of American democracy. Finally it will more clearly define the active role that all citizens must play in a successful democracy.

Course Topics
- Federal State and Local Elections
- Legislative Process
- Branches of Government
- Federal, State and Local Governments
- The Constitution

- Equal Protection and Due Process
- Rights and Responsibilities
- Political Parties
- Role of the Individual
- Public Service

PSYCHOLOGY

Credit: 0.5
Weight 0.5

Level: Grade 11, 12
Prerequisite: None

Textbook: *Glencoe Understanding Psychology (2001)*
Instructional Materials: textbook, worksheets, DVDs, podcasts

Course Description and Rationale: The Psychology course is offered as an upper class exploratory semester elective. Most post-secondary course work require course work in this discipline. The purpose of this course is to expose students to the variety of topics and concepts related to Psychology.

Course Topics:

- Methods of behavioral research
- Perception, Cognition and Learning Theory
- Classical and Operant Conditioning
- Short and Long Term Memory
- Psychological Testing
- Heredity and Human Development

MEDAL OF HONOR

Credit: 0.5
Weight 0.5

Level: Grade 12
Prerequisite: None

Instructional Materials: There is no textbook required for this class. Online resources will be used.

Course Description and Rationale: The lessons in this course are drawn from the personal accounts of living Medal of Honor recipients. These dramatic "living histories" and the accompanying instructional activities will encourage students to consider each concept from their own perspective. The character of these men is what stands out in each story. The Medal of Honor recipients demonstrate and articulate many of the abstract principles on which our nation was founded in a way that makes those principles very real. This course is designed to provide students with opportunities to explore the important concepts of courage, commitment, sacrifice, patriotism, integrity, and citizenship and how these values can be exemplified in daily life.

Course Topics:

- Medal of Honor Overview
- The Individual: Courage and Integrity
- Humanity: Sacrifice and Commitment
- The Nation: Citizenship and Patriotism
- Present/Future Relevance
- Medal of Honor Project

- Citizen Service Before Self Honors

Additional Activities: Students will work both individually and in groups to develop presentations and present them in class. These projects will include both in-class work and homework.

DEPARTMENT: THEOLOGY

THEOLOGY I: THE REVELATION OF CHRIST IN SCRIPTURE

Credit: 1.0
Weight: 1.0

Level: Grade 9
Prerequisites: None

Textbook:
Sacred Scripture, (Daniel Smith-Christopher, Rev. J. Patrick Mullen, Ave Maria Press), Interpretation of the Bible in the Church: Pontifical Biblical Commission (Presented on March 18, 1994), Dei Verbum, Vatican II Council Documents. Additional Reading: The Holy Bible (NABRE, Jerusalem, NRSV), Catechism of the Catholic Church
Instructional Materials: Each student will need a one inch vinyl binder with dividers for categorizing handouts and notes and storing extra loose leaf paper. Writing utensils include a blue or black pen, as well as a highlighter. This binder cannot be shared with other subjects! It serves as the basis for this class as handouts support and up-date the core material in the text. Videos: Digital Media (YouTube, NetFlix, etc.) will be accessed for movies instead of DVDs when possible. All videos/films will be reviewed by the instructor prior to classroom exhibition. Suggested media will be reviewed on a case-by-case basis for appropriateness.

Course Rationale and Description: The purpose of this course is to give students a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible they will come to encounter the living Word of God, Jesus Christ. In the course they will learn about the Bible authored by God through Inspiration, and its value to people throughout the world.

The class work consists of occasional oral reading, brief lectures, class discussions, hands-on activities, and research activities and projects. Most of the discussions and projects are done in cooperative learning groups. Use of digital media and internet technology will be used whenever possible to demonstrate the versatility of theological and scriptural study in a technological age.

Course Topics:
- Sacred Scripture
- Divine Revelation

Additional Activities: Putting into action the Spiritual & Corporal Works of Mercy.

THEOLOGY II: THE MISSION OF JESUS CHRIST

Credit: 1.0
Weight: 1.0

Level: Grade 10
Prerequisites: None

Textbook: *Our Moral Life in Christ (Gen. Ed. Rev. James Socias, MTF), Theology of the Body for Teens (Evert/Evert and Butler, Ascension Press), Your Life in Christ: Foundations of Catholic Morality (Michael Pennock, Ave Maria Press), YOUCAT Catechism (Ignatius Press)*
Additional Reading: *The Holy Bible (NAB, NABRE, NRSV), Catechism of the Catholic Church, Human Sexuality: A Catholic Perspective for Education and Lifelong Learning, USCCB.*
Instructional Materials: Each student will need a one inch vinyl binder with dividers for categorizing handouts and notes and storing extra loose leaf paper. Writing utensils include a blue or black pen, as well as a highlighter. This binder cannot be shared with other subjects! It serves as the basis for this class as handouts support and up-date the core material in the text. Videos: Digital Media (YouTube, NetFlix, etc.) will be accessed for movies instead of DVDs when possible. All videos/films will be

reviewed by the instructor prior to classroom exhibition. Suggested media will be reviewed on a case-by-case basis for appropriateness.

Course Rationale and Description: The purpose of this course is to help students understand all that God has done for us through the Son, Jesus Christ. Through this course of study, students will learn that for all eternity, God has planned for us to share eternal happiness with the Trinity, which is through the redemption Christ won for us. Students will learn that they share in this redemption only in and through Jesus Christ. They will also be introduced to what it means to be a disciple of Christ and what life as a disciple entails. The students will come to know that the Church is the living Body of Christ today. This Body has both divine and human elements.

Course Topics:

- Freedom and the moral act
- Ethical norms and laws
- The Ten Commandments
- The moral conscience
- Sin and conversion
- Theology of the Body

Additional Activities: Putting into action the Spiritual & Corporal Works of Mercy.

THEOLOGY III: ENCOUNTER WITH JESUS CHRIST: SACRAMENTS & VOCATIONS **Credit: 1.0**
Level: Grade 11 **Weight: 1.0**
Prerequisites: None

Textbook: *Meeting Jesus in the Sacraments (Michael Amodei and Janie Gustafson, PhD., Ave Maria Press), Christian Vocations (Michele McCarty, Harcourt), Together For Life (Joseph M. Chaplin, Ave Maria Press)*. Additional Reading: *The Holy Bible (NAB), Catechism of the Catholic Church*
Instructional Materials: Each student will need a one inch vinyl binder with dividers for categorizing handouts and notes and storing extra loose leaf paper. Writing utensils include a blue or black pen, as well as a highlighter. This binder cannot be shared with other subjects! It serves as the basis for this class as handouts support and up-date the core material in the text.
Videos: Digital Media (YouTube, NetFlix, etc.) will be accessed for movies instead of DVDs when possible. All videos/films will be reviewed by the instructor prior to classroom exhibition. Suggested media will be reviewed on a case-by-case basis for appropriateness.

Course Rationale and Description: The purpose of this course is to help students understand that they can encounter Christ today in a full and real way in and through the sacraments, and especially through the Eucharist. Students will examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life. Students will come to understand that it is only through Christ that they can fully live out God's plans for their lives. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples.

Course Topics:

- The Church as the Universal Sacrament
- Christ
- Faith
- Seven Sacraments
- Form & Matter of the Sacraments.

Additional Activities: Putting into action the Spiritual & Corporal Works of Mercy.

THEOLOGY IV: LIFE IN JESUS CHRIST IN THE WORLD TODAY

Credit: 1.0
Level: Grade 12 **Weight:** 1.0
Prerequisites: None

Textbook: *Exploring the Religions of the World* (Nancy Clemmons, S.N.J.M., Ave Maria Press), *Catholic Essentials: An Overview of the Faith* (Michael Amodei), *The Catholic Spirit: An Anthology for Discovering Faith Through Literature, Art, Film, and Music* (Michel Bettigole, O.S.F., and James D. Childs*), YOUCAT Catechism* (Ignatius Press)
Additional Reading: *The Holy Bible* (NABRE, NRSV, Jerusalem), *Catechism of the Catholic Church, Mere Christianity* (G.K. Chesterton),
Instructional Materials: Each student will need a one inch vinyl binder with dividers for categorizing handouts and notes and storing extra loose leaf paper. Writing utensils include a blue or black pen, as well as a highlighter. This binder cannot be shared with other subjects! It serves as the basis for this class as handouts support and up-date the core material in the text.
Videos: Digital Media (YouTube, NetFlix, etc.) will be accessed for movies instead of DVDs when possible. All videos/films will be reviewed by the instructor prior to classroom exhibition. Suggested media will be reviewed on a case-by-case basis for appropriateness.

Course Rationale and Description:
World Religions is an academically rigorous course challenging students to develop a critically reflective approach to the study of the major religions of the world. While the overall approach to the course is academic, the academic and spiritual integration of each student's faith and personal experiences are primary goals of the course. As in all the religion courses at ECCHS, the goal is to honor both our mind and spirit: to give reason to our faith and faith to our reason.

The context of the course is our increasingly globalized, pluralistic world. The course aims to clarify how religious beliefs and practices shape and influence society, and how culture shapes and influences particular religions. The aim is to understand religion as both problem and promise, having the potential to promote not only violence and division, but also peace and unity among the world's people. It is hoped that this new understanding will provide a new and deeper understanding of the Catholic and Christian tradition.

Course Topics:
- World Religions
- Catholic Social Teaching
- Catholic Essentials
- Christian Life

Additional Activities: Putting into action the Spiritual & Corporal Works of Mercy.