

SCIO CENTRAL SCHOOL 2025–2026 COURSE OFFERINGS GRADES 9–12

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^{*} Denotes courses that will have an upfront fee that will be reimbursed to families upon successful completion of the course

NYS Graduation Requirements

For students entering 9th grade in 2016 and thereafter Minimum number of credits required for graduation is **26**

Regents Diploma

Subject	Credits
English	4
Social Studies	4
Math	3
Science	3
Health***	.5
The Arts	1
LOTE* (Language)	1
Physical Education	2
Sequence/Electives	7.5

Advanced Regents Diploma

Subject	Credits
English	4
Social Studies	4
Math	3
Science	3
Health ***	.5
The Arts	1
LOTE* (Language)	3**
Physical Education	2
Sequence/Electives	7.5

Major Sequences Options

- 1. 2 3 unit sequences
- 2. 1 5 unit sequences (except English or social studies)
- 3. 1 3 unit sequence and, 1-5 unit sequence in English and Social Studies

Kev

- *LOTE Language Other Than English
- **3 units of second language, or 3 credits in CTE, or 5 credits in the arts
- ***NYS Regulations (Part 100) require all students entering ninth grade in the fall of 2001 and thereafter to receive Parenting Education prior to their graduation. Learning standards in the area of parenting shall be attained through either the Health or Family and Consumer Science programs or a separate course. Scio Central School has chosen to meet this requirement by developing a separate half-year course called Parenting. Students must take the Parenting course in addition to Health.

4 + 1 Pathways

At the January and March 2015 Regents meetings, the Board approved regulatory amendments to provide assessment pathways to graduation. These regulatory provisions allow students to meet the assessment requirements for earning a diploma utilizing a 4+1 assessment option.

See: http://www.nysed.gov/news/2015/board-regents-approves-new-graduation-options

Students who first enter grade nine in September 2011 and thereafter or who are otherwise eligible to graduate in June 2015 or thereafter, have the following options available in order to meet the assessment requirements leading to a Regents or Local diploma:

Required four (4): ELA Regents exam, 1 math Regents exam, 1 science Regents exam, 1 social studies Regents exam (or a Department Approved Alternative for any of the four required exams)

SCIENCE DEPARTMENT - Andrea Zeh

<u>LIVING ENVIRONMENT – 1 credit</u>- <u>Life Science:</u> <u>Biology</u>

This course explores the relationship between structure and function in living organisms, the flow of matter and energy in ecosystems, and the impact of human activities on the environment. It also analyzes how traits are passed from generation to generation and the



role of the environment in selecting for those traits. This course is designed to help students develop a coherent and scientifically based view of the world around them. Students will engage in the three dimensions of learning to explore how and why phenomena occur. Students will be encouraged to think critically, ask questions, and engage in scientific inquiry. To accomplish these goals, students will also enhance their ability to communicate their findings effectively and work collaboratively with others.

<u>EARTH SCIENCE – 1 credit</u>- This course explores the history and development of our universe, the formation of Earth, and the cycling of materials both within the Earth and on Earth's surface. This course will also examine the interactions between humans and the Earth to evaluate the impact of weather and natural disasters, resource management, and technological solutions implemented to control the natural systems around us. Students will engage in the three dimensions of learning to explore how and why phenomena occur. Students will be encouraged to think critically, ask questions, and engage in scientific inquiry. To accomplish these goals, students will also enhance their ability to communicate their findings effectively and work collaboratively with others.

<u>PHYSICS – 1 credit</u>- This course explores the fundamental principles governing the physical universe. The course investigates mechanics, energy, waves, and other physical phenomena through mathematical analysis, experimental investigation, and problem-solving applications. Students will engage in the three dimensions of learning to explore how and why phenomena occur. Students will be encouraged to think critically, ask questions, and engage in scientific inquiry. To accomplish these goals, students will also enhance their ability to communicate their findings effectively and work collaboratively with others.

Prerequisites: Algebra, Trigonometry (Geometry recommended)

<u>CHEMISTRY – 1 credit</u>- This course analyzes the structure and properties of matter at the atomic level, investigates chemical reactions and energy changes, and connects chemical concepts to real-world applications and technology. This course will help students understand the role of chemistry in their daily lives through theoretical study and practical laboratory experiences. Students will engage in the three dimensions of learning to explore how and why phenomena occur. Students will be encouraged to think critically, ask questions, and engage in scientific inquiry. To accomplish these goals, students will also enhance their ability to communicate their findings effectively and work collaboratively with others.

Prerequisite: Algebra

<u>FORENSIC SCIENCE – 1 credit</u>- Forensics is a full year course that earns 1 science credit. A strong scientific background will be beneficial as we encompass many disciplines to solve crimes in given situations. We will investigate forensic science, the laws, types of evidence, and crime.

<u>ENVIRONMENTAL SCIENCE – 1 credit</u>- Environmental Science is a course is a hand-on science course. Students will be introduced to major ecological concepts and the environmental problems that affect the world in which we live. Students will learn about how organisms interact in the environment including humans. During the winter months student will also learn how to set up and use hydroponic and raised bed gardens. In the early spring students will tap maple trees and make maple syrup. This course also has access to the school district's honeybees. Students will learn safe beekeeping techniques and strategies to promote pollinators in our community. Students will learn how to harvest honey.

ANATOMY & PHYSIOLOGY – 1 credit-

(*Prerequisite-Living Environment*) Must be in grades 10-12. This course is designed to investigate and discuss the human body. The human body is a complex, well-oiled machine and the only way to understand the machine is to know how each of the parts work. Because of this, our journey through the human body will begin with molecules, cells and tissues, and end with the 11 organ systems. We will investigate each system's proper functionality and consider the perspective of a medical professional when the system does not work properly. This course will have some very hands-on laboratory activities including dissections.

*All Regents science courses have a mandatory laboratory component that accompanies the required classroom instruction associated with earning a unit of credit. These laboratory experiences must be documented with satisfactory laboratory reports in order for students to qualify to take the Regents examination at the end of the course.

SOCIAL STUDIES DEPARTMENT- Collin Charles & Dylan Bowers

GLOBAL HISTORY AND GEOGRAPHY I-1 credit

The objective of this course is to cover the history, geography, economics, and political structures of World History from the Ancient River Valley Civilization through the Renaissance. Furthermore, the goal of the course is to develop research, problem-solving, and presentation skills. Finally, the purpose of the course is to promote a



better understanding of the world we live in today by investigating past developments and interactions of people.

GLOBAL HISTORY AND GEOGRAPHY II-1 credit

The objective of this course is to cover history, geography, economics, and political structures of World History from the Renaissance through the present. Furthermore, a goal of the course is to develop research, problem solving, and presentation skills. Finally, the course will promote a better understanding of the world we live in today, by investigating the past developments and interaction of the people.

<u>UNITED STATES HISTORY and GOVERNMENT – 1 credit</u>-The objective of the course is to cover the history, geography, economics, and political structures of the United States from the 13 colonies through the present. Furthermore, a goal of the course is to develop research, problem-solving, and presentation skills. Finally, the purpose of the course is to promote a better understanding of the country we live in today by investigating the past developments and interactions of people.

GOVERNMENT PARTICIPATION- 1/2 credit

The core curriculum is designed to be a culminating course of study that focuses on Social Studies Learning Standard 5 – Civics, Citizenship, and Government (the civics standard). Participation in Government is the civics capstone of a student's K-12 social experience. Upon entering 12th grade, students should be ready to synthesize and apply this content-rich experience to the study of contemporary and/or historic public issues and to increase the student's awareness of their rights and responsibilities as a citizen. Fundamental to Participation in Government is engaging students in defining, analyzing, monitoring, and discussing issues and policies.

ECONOMICS- ½ credit- Learn about 401K's, personal finance, stock market, life skills, critical thinking, credit, capitalism, profit motive, supply & demand, the business cycle, the financial benefits of post-graduation education and more. This class stretches our senior students by requiring them to perform at college or at post-graduation vocational training standards.

<u>HISTORY IN FILM – $\frac{1}{2}$ or 1 credit</u>- This social studies elective is an overview of World History from ancient civilizations to the present as viewed through several historical films. In addition to examining the films, students will also examine other secondary sources in an effort to determine and investigate historical accuracies of said films. The 20 or 40-week course is open to grades 10-12.

WORLD HISTORY THROUGH FILM AND FOOD – 1 credit

In this class, students will gain a deeper appreciation for both the art of movie entertainment and the history of mankind through cultural cuisine. We will analyze humanity's past through modern films starting with the Paleolithic Age and ending with modern day history. In addition, every other week, students will also be cooking food from history in order to better understand the cultures of ancient civilizations and societies around the world. Through this course, students will be able to see first-hand the development of the world as we know it today as it relates to cinema and cooking!

THE AMERICAN DREAM IN ACTION - 1 credit-

The American Dream in Action is a research-based course designed to explore the stories of individuals who achieved extraordinary things, fulfilling the promise of the American Dream. Throughout history, the United States has been defined by its ability to innovate, overcome challenges, and achieve greatness. From transformative inventions and groundbreaking social movements to cultural milestones and monumental infrastructure projects, this course examines the achievements that not only shaped the nation but also demonstrated what is possible through perseverance, vision, and determination.

MATHEMATICS DEPARTMENT-

Tamra Yeager, Carmen Vegder & Mike Pavlock

<u>ALGEBRA I – 1 credit</u>- This course is the first mathematics course in high school and the focal point is on the 5 content strands from the New York State Board of Regents. They are Algebra, Probability, Statistics, and Reasoning. With a focal point on functions; specifically linear, quadratic, and exponential functions. Students must pass the Algebra Regents Exam in order to earn a high school diploma.



<u>GEOMETRY – 1 credit</u>- This is a Regents course that is intended to be the second course in mathematics for college bound students, particularly those who wish to study a strong Math related curriculum. Emphasis is on 2 dimensional and 3-dimensional plane and coordinate geometry, Geometric Relationships, Constructions, Reasoning with Proof, Transformational Geometry, and Coordinate Geometry while still continuing Algebra skills work. **Pre-requisite** must pass Algebra and the Algebra Regents exam.

<u>TOPICS of GEOMETRY – 1 credit</u>- This is a non-Regents course that is intended for college bound students. Emphasis is on 2 dimensional and 3 dimensional plane and coordinate geometry, Geometric Relationships, Constructions, Reasoning with Proof, Transformational Geometry, and Coordinate Geometry while still continuing Algebra skills work. **Prerequisite** must pass Algebra and the Algebra Regents exam.

<u>ALGEBRA II–1 credit</u>- This is a Regents course that is intended to be the third course in mathematics for college-bound students, particularly those who wish to study math, science, technology, business, or engineering in the future. The emphasis of this course is on intermediate Algebra, Trigonometry, Probability, and Statistics.

*COLL. PRE-CALCULUS 1054 – 1 credit - Meets the requirements for the St. Bonaventure Pre-Calculus curriculum. Students will follow the St. Bonaventure syllabus and will receive 4 credits from St. Bonaventure upon successful completion of the course. Major topics include Advanced Algebra, Polynomial, Exponential, Logarithmic, and Inverse Functions, Graphing, Trigonometry, and Statistics. Homework is given nightly and is very rigorous.

*COLL. CALCULUS 1084 – 1 credit- Meets the requirements for the St. Bonaventure Calculus curriculum. Students will follow the St. Bonaventure syllabus and receive 4 credits from St. Bonaventure upon successful completion of the course. Major topics include Limits, Derivatives, Applications of Derivation, and Integration. The material is college level and students need to be willing to put in many hours of homework and study to succeed.

Prerequisite is Pre-Calculus 1054.

*COLL. CALCULUS II – 1 credit- Meets the requirements for the St. Bonaventure Calculus curriculum. Students will follow the St Bonaventure syllabus and receive 4 credits from St Bonaventure upon successful completion of the course. Major topics include a continuation of Calculus I that includes methods of integration, numerical integration, applications of the definite integral, Taylor polynomials and approximations, and infinite sequences and series. Prerequisite is College Calculus I.

*COLL. MAT 1500 Problem Solving w/Mathematics – 1 credit - Students will develop problem solving skills through a detailed study of topics such as financial mathematics, linear and exponential modeling, and geometry, in concert with specific problem solving strategies such as drawing diagrams, making systematic lists, looking for patterns, identifying subproblems, and working backwards. Solution presentations and communication are emphasized. Students will earn 3 college credits. **Prerequisite:** MAT 0500 or placement exam; must meet minimum college level reading score: Accuplacer 80+.

*COLL. MAT 1540 Elementary Statistics – 1 credit - Students will investigate various topics in both descriptive and inferential statistics including measures of central tendency and spread, graphical analysis of data, probability, random sampling, correlation and regression, hypothesis testing and confidence intervals. Practical applications are emphasized throughout the course. A significant part of the course is taught in a laboratory setting using a software package such as Minitab. Students will earn 3 college credits. **Prerequisite:** MAT 0600 or MAT 1500 or placement exam; must meet minimum college level reading score: Accuplacer 80+.

<u>PERSONAL FINANCE/FINANCIAL MATH – 1 credit</u>- This math elective can count as a third year of math. Upon successful completion of this course, students will be able to balance their checkbook, do a tax return, understand car insurance, life insurance, and health insurance; understand concepts of loans and credit cards; understand principles of car and home ownership, decide on 401k and investment accounts; how to work a cash register and make change; understand time cards, payroll deductions and calculate take-home pay; determine budgets, property taxes and basic money management including, electronic banking, utilize ratios, proportions and graphing equations to determine future returns on investments. **Prerequisite** must pass Algebra and the Algebra Regents exam.

<u>ACCOUNTING I- 1 credit</u>- Accounting can count as your third year of math. Upon successful completion of this course, students will be able to: understand the basic principles, elements, and concepts of accounting, use proper methods to record and communicate useful financial data to others, be able to perform a complete accounting cycle, and prepare financial statement.

<u>ACCOUNTING II- 1 credit</u>- Upon successful completion of this course, students will be able to: perform financial statement preparation & payroll accounting, and manufacturing cost systems, and perform a complete accounting cycle for a merchandising corporation. **Prerequisite** must pass Accounting I.

<u>MEDIA COMMUNICATIONS- 1 credit-</u> This course introduces students to various media technologies used in business for digital communications. Areas of study will include website development, user interface, video, photo, written content, social medial networking, and frontend design. These will be used to communicate with the Scio Community in different ways.

Students will create a variety of projects that include working with different project models ranging from individual work to small groups. Students will learn the steps that it takes to make good media projects, from planning and scripts, production and camera work, sound recordings, post- production and more.

Students will need to have time management skills and be able to work on multiple projects at once and communicate with team members. Students will produce original digital content; students will also be trained in professional educate and will be held to a high standard. This course teaches real-world skills in visual perspective, meeting deadlines, communication, teamwork, and working with professional technology.

Instruction takes place in a project-based learning environment and class sessions with a focus on "hands-on" training.

*Enrollment in course will be based on teacher recommendation

ENGLISH DEPARTMENT-

Mindi Carley and Hannah Andersen



ENGLISH 9- 1 credit- The curriculum for this course aligns with the NYS Next Generation ELA Standards.

The course focuses on learning and developing students' skills as critical thinkers, readers, writers, speakers, and listeners. Students will read fictional literature, non-fiction, and informational texts. Class novels and shorter texts range from the classics to present day publications. Incorporating personal reading, creating writing, and projects allows students to showcase their personal interests. Throughout the year, student continue to review and build upon ELA basics, such as parts of speech and semantics.

ENGLISH 10-1 credit- English 10 is a Common Core aligned course designed to familiarize students with the foundations of fictional writing, including short stories, memoirs, and the novel. Students also study the core principles of poetry, and study the rudimentary principles Shakespearean tragedy. There is a strong focus on reading comprehension strategies, personalized learning, group projects and individualized vocabulary expansion. Basic essay writing skills and other forms of modern communication, including public speaking, are also main objectives of the course. The fostering of growth mindset is reflected in portfolio and project-based assessments, and 21st Century Learning and socio-emotional learning are critical educational philosophies reflected in all lessons, projects, and assessments.

ENGLISH 11-1 credit- English 11 is a Regents Course designed to fully prepare students to excel on the Common Core Examination in English. Students will be instructed in analyzing complex fiction and non-fiction texts, interpreting classic and modern poetry, and studying the intersection between American Literature and American History in order to produce students who are capable of critical thought, engaged in modern American civics, and cognizant of the relationship between literary art, informational texts, and other modern forms of mass communication. In addition, students in this course will hone their argumentative writing skills by studying the rudiments of rhetoric, both written and spoken. The fostering of growth mindset is reflected in portfolio and project-based assessments, and 21st Century Learning and socioemotional learning are critical educational philosophies reflected in all lessons, projects, and assessments.

<u>ENGLISH 12–1 credit</u>- English 12 is a required course for graduation and focuses on personalized learning and student-interest based projects. In this course students will learn to effectively communicate in writing, by composing essays, applications, business letters, email communications, and other written forms of expression required for post-graduate success in the 21st Century. Students will read novels, short works of literature, and they will also study film and poetry. Finally, this course culminates in a Senior Exit Project in which students engage in three intersecting components that show their growth and progress toward meeting their personal goals during the course of their Senior Year: a portfolio, a personal essay, and an

exit interview. It is the intent that students in this course will be thoroughly prepared to be lifelong learners and readers, who have clearly determined goals, and all of the requisite oral and written communication skills to succeed, wherever their paths may lead. The fostering of growth mindset is reflected in portfolio and project-based assessments, and 21st Century Learning and socio-emotional learning are critical educational philosophies reflected in all lessons, projects, and assessments.

*COLLEGE ENGLISH 1503–½ credit (Fall Semester)- This 20-week, college-level course, sometimes referred to as *Freshman Composition* on college campuses, explores the rhetorical and writing standards expected of collegiate freshmen. The course, taught in association with Alfred State College, seeks to improve student's writing clarity, precision, and development of argumentative acumen. This course will provide students with the skills necessary to succeed in any collegiate discipline by affording them the requisite reading comprehension, academia-worthy vocabulary, formal research, writing and debate skills required on America's modern-day college campuses. During the course, students will learn how to navigate research databases, compile and integrate divergent and nuanced informational texts, and both compose and deliver orally airtight arguments based on solid logic, research, and know-how. The course features the use of exemplars, models of excellence, and clearly defined objectives and grading standards in order to assist students in achieving the highest standards of success. The fostering of growth mindset is reflected in portfolio and project-based assessments, and 21st Century Learning and socio-emotional learning are critical educational philosophies reflected in all lessons, projects, and assessments. Students will earn 3 college credits.

*COLLEGE ENGLISH 2603-1/2 credit (Spring Semester)- This 20-week course, also known as Introduction to Literature, is a common college-level course in the exploration of both modern and classical literature, taught in conjunction with Alfred State College. It requires students to analyze a variety of literary genres to mine for personally relevant themes. Students will be engaged in a learning process whereby they will be expected to grow in their ability to comprehend, interpret, and critique literature through writing about and discussing a full range of literary works. As always, the expansion of a collegiate-level working vocabulary will accompany this learning, and students will design and carry out projects and compose written arguments to support their analyses of the written word in genres such as short stories, poetry, memoirs, novels, and film. Finally, this course culminates in a Senior Exit Project in which students engage in three intersecting components that show their growth and progress toward meeting their personal goals during the course of their Senior Year: a portfolio, a personal essay, and an exit interview. It is the intent that students in this course will be thoroughly prepared to be life-long learners and readers, who have clearly determined goals, and all of the requisite oral and written communication skills to succeed, wherever their paths may lead. The fostering of growth mindset is reflected in portfolio and project-based assessments, and 21st Century Learning and socio-emotional learning are critical educational philosophies reflected in all lessons, projects, and assessments. Students will earn 3 college credits.

<u>CREATIVE WRITING- 1 credit</u>- This elective allows students to explore their own creativity by writing fiction, short stories, personal essays and poetry. Students will keep writer's journals, participate in idea-generating activities and work with partners and small groups to provide feedback. Students will also delve into public speaking at an introductory level.

<u>JOURNALISM- ½ credit</u>- Students in Journalism class will learn reporting basics and newspaper style: interview techniques, opinion piece composition, editing skills, and how to responsibly and accurately write a variety of news stories. Students will read and examine current media examples, learn the ethics of reporting, create polls and special interest pieces. Basic design and layout using Canva software will be addressed. Students will report for and write the school's newsletter *The Scio Gazette*.

<u>LITERATURE & FILM- ½ credit</u>- In this elective course, students will learn how to analyze a novel in depth, as well as it's film counterpart. Students will learn the basics of film studies, focusing on some of the technical aspects, while using literary analysis techniques to study the content and director's choices in each film. The course will be split into two portions, with the first semester focused on classical literature, and the second semester on modern novels.

FOREIGN LANGUAGE DEPARTMENT-

in class.

Brittany Canfield

INTRODUCTORY SPANISH- This course is an introductory course to the Spanish language and culture of the Spanish-speaking world. The four language skills of listening, speaking, reading, and writing are stressed. Students are expected to participate actively in class activities which practice conversation skills. Vocabulary and grammar are also practiced in class activities. Students often work in pairs and prepare dialogs to perform in front of the class. There is homework every day which students are expected to do in order to be successful

<u>SPANISH I– 1 credit</u>- Continuation of the same skills which are studied in Spanish I, but in greater depth. Students begin to deal with more complex language structure and must express themselves in speaking and writing. Homework, again, is the norm and students are expected to do it in order to be successful in the course.

<u>SPANISH II–1 credit</u>- Upon completion of this level, students are expected to have acquired a command of the key vocabulary and grammatical structures necessary for personal communications as well as appreciation for the breadth and variety of the Spanish-speaking world.

<u>SPANISH III–1 credit</u>- Continuation of the concepts and skills acquired in Spanish III. Students will continue to work on mastery of key vocab, grammatical structures and cultural differences. At the conclusion of this course students will be expected to be able to fluently speak and read the language in all tenses.

FAMILY AND CONSUMER SCIENCE DEPARTMENT-

Melissa Carlin

PARENTING (*Required in 10th grade*) 1/2 credit- The purpose of this course is to empower students to knowledgeably explore and define their personal values concerning parenting and to become knowledgeable of the responsibilities of becoming a parent. This course focuses on identifying those concepts of responsible childbearing that every young person should know. The potential parent will become aware of the need to begin caring for the personal health, practicing informed decision making about personal lifestyle,



forming positive ways to meet physical, psychological, and emotional needs of a child and developing awareness of the kind of parent he or she wants to be.

<u>COOKING I-1 credit</u>- This is an introductory course opened to grades 9 - 12. Through book and lab work students will cover nutrition, consumer information, household management, kitchen safety and sanitation, food preparation, social and cultural aspects of international food.

COOKING II-1 credit- Students will expand on cooking skills learned in Cooking I. The major emphasis of this course is working in the kitchen labs to increase personal cooking skills.

BACHELOR COOKING, 1/2 credit- Students learn to prepare recipes and meals. Time is spent on learning to make specialty items such as homemade breads, pies, candy and cakes. This course is open to 11th and 12 grade students. Students in 9th and 10th grade will have completed Cooking 1 and are taking Cooking 2, may join also.

ART DEPARTMENT-Tammy Straight

<u>STUDIO ART – 1 credit</u>- (Required except for students taking a music class or DDP course) Students explore lessons based on different types of medium throughout the year. This class often helps students see that there are many different types



of art. Types of medium offered in class are painting, drawing, printmaking, pottery, and calligraphy.

<u>DRAWING AND PAINTING – 1 credit</u> – Students are exposed to different techniques of drawing and different types of paints and painting styles uses primarily drawing and painting materials to teach the elements and principles of design. A variety of problems and other media are also incorporated as well as history and criticism. Students will develop a portfolio that shows their skill in media and problem solving. Prerequisite- Studio Art

SCULPTURE – 1 credit- 3-Dimensional/Sculpture/Ceramic Art! In this course, we will explore a variety of art process, concepts and techniques. Students will master the basics of composition and quality craftsmanship. Some of the media we will explore include paper, papier mâché', wire, clay, assorted Sculpture, cont.—found objects, wood, and other mixed media. As will any art course, we will study the work of Master Sculptors/Ceramist and other artisans as a source of cultural understanding and inspiration. Sculpture/Ceramics is a course which blends academic and technical understanding with creative development. Through this course, students will not only building confidence in her/his artistic ability, but build communication skills, heighten sensitivity to one's environment and increase aesthetic awareness. Creative activities will encourage critical thinking, decision-making and problem solving. Students will foster a respect for and appreciation of the arts, incorporation it into their everyday lives. From maximum learning and growth to take place, students will need to welcome constructive criticism, be willing to work hard and open to new experiences.

<u>ADV. SCULPTURE- 1 credit-</u> Second Year Art Course for students to further develop their 3-D skills through the use of advanced concepts and processing in clay and a variety of other media. Prerequisites: Studio Art and Sculpture I

<u>PHOTOGRAPHY-½ credit</u>—This course will help the students become well rounded in the fundamentals of digital photography. Four areas of instruction will be emphasized: How cameras work, how composition works, how lighting works, how to use photo editing software. Students will, generally, receive basic instruction, demonstration, and see samples of the desired outcomes, at the beginning of each period. They will be allowed to go outside and shoot assignments, based on what they are learning. Perhaps the most useful part of classroom instruction will be daily reviews of photos students have shot the previous day(s). They will see what makes a successful photo and what does not.

<u>ADV. PHOTOGRAPHY- ½ credit</u> – Students will build on skills from Photo I and learn advanced Photoshop techniques. Skills will include photo shoots, digital manipulation and portfolio development.

<u>ADV. ART I AND II- 1 credit</u> – Third and fourth year art courses for various art students. Students select area of concentration and exploration. Courses include Advanced Drawing, Watercolor Acrylics, Graphics, Sculpture, and Advertising Design. Prerequisite- Studio Art, Drawing & Painting and or Sculpture.

<u>INDEPENDENT STUDY IN ART-1 credit</u> – an intensive art concentration in a specialized area of the visual arts – selected by the student with special permission of the teacher. College visual art experiences will be introduced which would give the college-bound student more advanced instruction. (Prerequisite – Studio Art, Drawing and Painting or Sculpture, Advanced Art I and II)

<u>CREATIVE CRAFTS- 1 credit</u> – This curriculum introduces students to the world of contemporary crafts. By working with a variety of materials such as paper, wire, metal and beads, students will develop an understanding of three-dimensional design. Within each unit, students will be exposed to artists who work in the materials we will be exploring. They will understand the integral role that crafts play in everyday life. Quality craftsmanship will be emphasized as a goal for each project.

MUSIC DEPARTMENT-

Amy Berardi (Choir) & Adam Stack (Band)

<u>SENIOR CHOIR – 1 credit</u>- Open to all students in grades 9-12. In addition to performing in Christmas and Spring concerts, students are selected for area all-state chorus, all-county chorus, and solo festival from this group.



<u>SENIOR BAND–1 credit</u>- Open to students in grades 9-12. This ensemble will rehearse and perform musical selections that are suitable for wind instruments that include flute, clarinet, saxophone, French horn, trumpet, trombone, euphonium, tuba, and percussion. Other non-traditional instruments can be incorporated as well, however, the repertoire will be oriented primarily towards traditional wind band instruments. Ability to read musical notation is required and this skill will be further developed in this course. All enrolled students are scheduled for and must attend a weekly small group lesson that occurs on a rotating schedule throughout the school day. All students are required to perform for the winter and spring concerts, Memorial Day Parade, and graduation ceremony. Students are offered the opportunity to perform in solo festival which serves as a qualifier for All-County and All-State band.

<u>GUITAR-</u>Open to students in grades 9-12. This class is an introduction to the guitar. Students will learn how to read tablature, play riffs, and strum chords. Enrollment is limited based on instrument availability.

<u>MUSIC THEORY-</u> Open to students in grades 9-12. Students will learn the fundamental components of music and musical notation. Topics will include advanced rhythmic notation, scale and chord construction, analysis, ear training, and more. This class is recommended for students who already have a strong understanding in reading musical notation.

TECHNOLOGY- Daniel Smith

DESIGN AND DRAWING FOR PRODUCTION (DDP)- 1/2 credit-

This course combines basic technical drawing with solving design problems. The students will be presented with a series of design/engineering problems that will be solved with the use of drawings, resulting in the creation of a model or product of their design, and when applicable, testing of their design. Working designs will be manufactured. This course may be used for the required art credit.



GRAPHIC COMMUNICATION- 1/2 credit- Graphic Communications is a single semester course that explores classic printing, digital photography, photo editing, graphic design, and advertising. Students will develop hands-on experience with cameras, printing presses, pad printing, vinyl cutting, silk screen printing, etching and computer programs and procedures. Students will learn how to operate the following computer software: Google SketchUp, Photoshop and Publisher.

MATERIAL PROCESSING- 1/2 credit- Materials processing is a half year, half credit course with no pre-requisites. It is designed to give students a foundation and practical knowledge about the way humans convert various materials into useful products. The course focuses on processing a variety of materials such as wood, metal, plastic, and composites through techniques of forming, separating, combining, and conditioning. Hands-on activities will include product design, product layout, hand and machine tool use, fastening, finishing, and school and community involvement.

<u>METAL FABRICATING- 1/2 credit</u>- This half year course will emphasize tools, materials, machines and procedures used in metal working. The students will demonstrate the ability to safely use hand tools, power tools and metalworking machines. The units covered will be sheet metal, welding, casting and basic machining. Students will be expected to design and build artifacts made from metal.

<u>COMPUTER AIDED DESIGN- 1/2 credit-</u> This course will be an advanced course for technical drawing students. The students will work with basic 3-view drawings and then they will be drawing 3D drawings using 3D modeling software. Students will be learning how to 3D print using a MakerBot. This course will add to technical designing abilities. Students will be introduced to reverse engineering. The students will be introduced so basic CAM (Computer Aided Machining) and CNC (Computer Numerically Controlled) milling operations.

WOODWORKING- 1 credit- This course is a study of wood and the processes used to turn wood into finished products. In this course the students will use a wide range of hand tools and power tools. The students will begin their projects with rough cut lumber and go through the process of surfacing lumber. The students will know specific uses of woodworking machines in both the industrial setting and as a leisure activity.

DRIVERS EDUCATION DRIVER AND TRAFFIC SAFETY-1/2 credit-

The goal of Driver's Education is to prepare young drivers to operate motor vehicles legally, safely, and responsibly. Students will learn about safe driving techniques and the proper attitude and driving behaviors necessary to operate an automobile safely through in class discussions, lectures, and driving experience. Drivers Education consists of two sections; classroom and behind the wheel. The two sections will be taught over the Summer. Students must pass both sections to receive an MV 285. If a failure occurs in either part, the student will not be able to earn the MV 285 certificate. Prerequisite: Must have a New York State drivers permit by the first day of class.

- o CLASSROOM: The state of New York requires a minimum of 24 clock hours of classroom instruction to complete Driver Education.
- DRIVING/OBSERVATION: The student must successfully complete 24 hours of in car training with a minimum of 6 hours behind the wheel to meet the State of New York requirements (The MV 285 is a document that can be used to sign up for a road test and also upgrade a junior license to a senior license when turning 17 and can be used for insurance reduction.)

COMPUTER PROGRAMMING DEPARTMENT-

Mike Pavlock

INTRO. TO COMPUTER PROGRAMMING (9-12)—1 credit-Programming skills are introduced in this course, which uses the program Future Basic for Macintosh. Students will write simple games and have opportunities to create their own projects. Good programming structure is stressed. A final project during the last marking period requires the student to use all the skills learned during the year to create their own application.



*COLLEGE JAVA PROGRAMMING (10-12)—1 credit- This is a college-level course taught to those students who are interested in obtaining college credit for Computer Science. This course is demanding, requiring students to learn advanced logical skills and apply them in a programming environment. The professional programming language JAVA is used in this course. Four (4) credits from St. Bonaventure University will be earned from this course.

*COLLEGE JAVA PROGRAMMING II (10-12)—1 credit- This is a college-level course taught to those students who are interested in obtaining college credit for Computer Science. This is the second course in the computer science major sequence. The course utilizes the object- oriented design approach to building applications, which emphasizes the creation and utilization of reusable software tools. Students are introduced to data structures that are commonly encountered in building software applications and to the analysis of the efficiency of algorithms used to solve problems. The programming language Java is used to implement software designs. Four (4) credits from St. Bonaventure University will be earned from this course. Prerequisite is College Java Programming I.

PHYSICAL EDUCATION/HEALTH DEPARTMENT –

Doreen Martin & Kaiden Bowers

PHYSICAL EDUCATION (Grades 9, 10, 11,12 Co-Ed) – 1/2 credit

Our Philosophy – Physical Education will provide a welcoming environment for students of all skill levels. Our objective as physical educators is to provide all students with the knowledge and skills needs



educators is to provide all students with the knowledge and skills necessary to achieve and maintain a healthy level of physical fitness. This is achieved through the medium of movement – regardless of innate and learned abilities, culture, or gender. Students will participate in a variety of activities including team sports, individual sports, and lifetime activities.

<u>CPR/AED – Mini Course (Required for Seniors)</u>- This hands-on skills training prepares you to respond to breathing and cardiac emergencies. It also teaches the skills and knowledge needed to provide care for victims of sudden cardiac arrest through the safe use of an automated external defibrillator (AED).

HS HEALTH—1/2 credit—The sophomore health program is focused on the individual and the problem areas that students are faced with in our society. Students evaluate their development in "The Skills of Living" through self-concept and self-image and reaffirm the establishment of self-confidence, self-discipline, attitudes, responsibilities and values. Students are presented with an examination of individual problem-solving skills, responsible decision making, use of refusal skills and behavioral attitudes in relation to the mental and social problems that relate to them in our society today.

FOCUS ON FITNESS-1 credit- The course will focus on fitness, placing a higher emphasis on personal fitness than the traditional high school physical education curriculum. The students can expect to be challenged on varying aspects of fitness using the specific activities of each unit to enrich the targeted fitness areas. Students will be exposed to a plethora of methods to advance their personal fitness, developing flexibility, muscular fitness, and cardio-respiratory endurance using advanced training methods. They will also have an opportunity to apply sport and recreation activities for the attainment of the fitness objectives. The amount of skill taught and practiced in a given unit will be greatly reduced in comparison to the normal curriculum, to focus on the fitness objectives of the course. The unit activities will be incorporated to meet the fitness objectives. Students seriously committed to advancing their personal fitness levels will appreciate this course.

ADVANCED WEIGHT TRAINING-1/2 credit-

(There is a limit of 10 students per Semester) This course is designed to give students the opportunity to learn weight training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training activities. Students will learn the basic fundamentals of weight training, strength training, aerobic training, and overall fitness training and conditioning. Course includes mainly activity sessions but some lecture sessions as well. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for a lifetime.

*DISTANCE LEARNING COURSES

<u>HIST 1143 Survey of American History I- 3 College credits – Aran Heaney</u> - This course is an introductory survey of American history from the early Native Americans and European colonization through the Civil War and Reconstruction. Topics include native cultures, European heritage, the colonial experience, revolution and the new republic. Emphasis will be placed on the formation of the constitution, reform movements and political compromises. Special attention will be paid to the common institutions in American society and their effects on different groups.

<u>HIST 2153 Survey of American History I- 3 College credits – Aran Heaney</u> - This is an introductory survey of American History from the Civil War and Reconstruction to the present. Topics include western migration, the impact of industrialization and urbanization, the rise of organized labor and the rise of the United States as a world power. The course will cover the social, political, cultural and economic life of the people of the United States, with a special focus on unity and diversity during the 19th and 20th centuries.

<u>PSYCHOLOGY-1/2</u> <u>high school credit and 3 college credits</u> - A 20-week introductory course in the study of behavior organisms. Major topics covered include Psychological Methods, Human Growth and Development, Understanding Human Behavior, Learning and Thinking, Awareness, Emotions and Motives, and Conflicts and Adjustments. *There may be prerequisites and a fee associated with this course*.

<u>SOCIOLOGY – ½ high school credit and 3 college credits</u>- Students will study social patterns affecting the structure and functioning of group life such as cultural values, deviance, class structure, and social change. Examines methods and perspectives sociologists employ, and the ways group forces influence the individual in society. *There may be prerequisites and a fee associated with this course*.

BIOL 1104 – 1 high school credit and 3 college credits- In this course, including the laboratory, we will explore the scientific method and the limits to empirical knowledge. This is an introductory biology course which involves an intensive study of life at the cellular level through observation, scientific logic, and hypotheses. It teaches students basic vocabulary and concepts in the areas of introductory chemistry, cell structure and function, basic genetics, and molecular biology. The laboratory component investigates cellular and biochemical aspects of living matter through observations and experiments. This course also addresses the core learning outcome: "Identify, evaluate, and engage in scientific and empirical modes of inquiry." *Regents Chemistry is a prerequisite for this course*.

<u>ON-LINE COURSES</u> – There are many on-line courses available through <u>www.caboces.org</u>. Please speak with Mrs. Hardy if this is an option that interests you.