

# = Seton Catholic Central

70 Seminary Avenue Binghamton, NY 13905 607.723.5307

2019-2020 **Course Description & Information Guide** Grades 7-12



## Seton Catholic Central

70 Seminary Avenue Binghamton, NY 13905

Tel: 607-723-5307 Fax: 607-723-4811

Mr. Matt Martinkovic, Principal mmartinkovic@syrdiocese.org

Mr. Patrick Monachino, Vice Principal pmonachino@syrdiocese.org

## **MISSION STATEMENT**

The Catholic learning environment at Seton Catholic Central is inspired by our ever-present teacher, Jesus Christ. Our students are encouraged to develop a love of learning which will serve them throughout their lives. Our mission is to meet each student's needs — spiritual, academic, physical, social, and emotional — through a fiscally responsible program that recognizes the importance of stewardship in all its forms.



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Please note: All elective courses listed are tentative. They are subject to sufficient enrollment and staffing.



## Seton Catholic Central High School Graduation Requirements

<u>Course</u>	Regents Diploma	Advanced Regents <u>Diploma</u>
Theology+	4	4
English	4	4
Social Studies	4	4
Mathematics	3	3
Science	3	3
Health	.5	.5
Art/Music	1	1
LOTE	1	3*
Physical Education	2	2
Electives	3.5	1.5

<sup>+</sup>Transfer students are not required to make up Theology credits from previous grades
\*One of the following must be completed: 3 credits in LOTE
OR completion of a 5 unit sequence in the Arts.

# Regents Exam Requirements (Traditional Combination) Pass with Score of 65 or Higher

Regents Diploma	Advanced Regents Diploma
Science Regents	2 Science Regents
Math Regents	3 Math Regents
Social Studies Regents	Global History and Geography Regents
English Regents	U.S. History Regents
Pathway Assessment (Additional Math Regents, Science Regents, or Social Studies Regents)	English Regents
	LOTE Checkpoint B Comprehensive Exam
Total of 5 Exams	Total of 9 Exams

For more information on NYS Graduation Requirements, please visit <a href="http://www.p12.nysed.gov/ciai/gradreq/intro.html">http://www.p12.nysed.gov/ciai/gradreq/intro.html</a>



### **Special Endorsements**

**Honors Designation:** Students may qualify for Honors Designation on either the Regents or Advanced Regents Diplomas if they attain an average of 90% or higher on all required Regents exams.

**Math Mastery:** Students will receive a Math Mastery Designation on their high school diploma if they score 85% or higher on all three Mathematics Regents exams.

**Science Mastery:** students will receive a Science Mastery Designation on their high school diploma if they score 85% or higher on three Science Regents exams.

### NCAA Division I & II Eligibility Standards

If you plan to enroll in any Division I or Division II College or University as a student athlete, please visit <a href="http://www.ncaa.org/student-athletes/future">http://www.ncaa.org/student-athletes/future</a>, read this information carefully, and consult with your school counselor to verify your coursework. It is essential that you discuss the eligibility standards with your coach and school counselor. You can also contact the NCAA National Office at (877) 262-1492.

#### **Definitions**

**Advanced Placement (AP)** - A rigorous high school course taught at the college-level. Colleges and universities may grant placement and course credit to students who obtain high scores on the College Board issued examination. Students are responsible for ordering and paying for the examination. Examination ordering will take place in the fall. Additional information can be found at <a href="https://apstudent.collegeboard.org/home">https://apstudent.collegeboard.org/home</a>

**Elective** - An elective is a subject which you may choose to take because you are particularly interested in its content.

Fast Forward - SUNY Broome courses taught at the high school. Students can earn college credit while simultaneously earning high school credit. Additional information can be found at <a href="http://www2.sunybroome.edu/ffec/fast-forward/">http://www2.sunybroome.edu/ffec/fast-forward/</a>

**Prerequisite** - A prerequisite subject is one that is required before a more advanced course can be taken in the same field. (For example, Spanish 1 is a prerequisite to Spanish 2.) Prerequisites are shown as part of the course description for most courses.

**Regents** - A Regents program follows the course of study developed by the New York State Education Department. Certain final examinations are statewide and are prepared by the State Education Department for administration at prescribed times. Examination schedules are available at <a href="http://www.p12.nysed.gov/assessment/schedules/schedule-hs.html">http://www.p12.nysed.gov/assessment/schedules/schedule-hs.html</a>

**Sequence** - A sequence consists of 5 units in one field of knowledge. Seton offers sequences in Fine Arts and Visual Arts. Students pursing a sequence in place of LOTE credits for an Advanced Regents Diploma must consult with their school counselor to ensure proper course placement.

**Unit** - One unit of credit is earned for a passing grade in each subject taken for a full year. If a subject is taken for only half the school year, one-half unit is earned. A unit of study means at least 180 minutes of instruction per week throughout the school year, or the equivalent.



## THEOLOGY

Students who attend SCC are assigned to a specific theology course based on grade level. The purpose of the Theology Department is to instruct the student in sound Catholic Doctrine, thus enabling him/her to be deeply rooted in the principles of Christian living now and in the future. The department also aims to contribute significantly to the building of a vibrant Christian community among the students of our high school and to provide spiritual direction.

### 007. GRADE 7 THEOLOGY

The main focus of the 7th grade is instruction in doctrine, Scripture, morality, prayer, liturgy, and the ability to relate what is learned in the classroom to real life decisions. Students will learn the basic tenets of the Catholic faith, will contribute to the well-being of others through the performance of service in the community, and will demonstrate integration of virtues by being respectful of others, compassionate, tolerant, honest, etc.

Grade(s): 7

#### 008. GRADE 8 THEOLOGY

The 8th grade course in Theology continues the aim of learning and practicing the basics of the Catholic faith, plus, the knowledge and heritage of their faith, values, and the Bible. Students will continue to learn the basics of the Catholic faith and demonstrate all virtues in daily life, perform community service hours, and discuss real-life problems and situations and reflect upon how the Catholic faith helps lead to good, moral decisions.

Grade(s): 8

### 009. THEOLOGY 9

#### 1 Unit

This one year course is designed to give the student an understanding of the relationship between God and us. This understanding will be accomplished through the study of the relationship between God and people in both the Hebrew Scriptures and the Christian Testament. The topics to be covered in the Hebrew Scripture include the patriarchs, the exodus, the judges, the kings, and the prophets. Topics to be covered in the Christian Testament include the portraits of Jesus as written by the four evangelists.

Grade(s): 9

#### **010. THEOLOGY 10**

### 1 Unit

The main focus of this course is to study the basic teachings of the Catholic Faith. The topics that are stressed are: our search for God through faith and religion; our faith-roots in Judaism; the life and teachings of Jesus; the mission of the Church from Jesus; and the sacraments and spirituality. Students will gain a better understanding of Catholic beliefs, learn about the gift of faith and how to respond to it and live it out, and come to a better understanding of the practices and traditions of the Catholic Church.

**Grade(s): 10** 

Prerequisite: Successful completion of Theology 9/enrollment in Grade 9 for new students

### 044. HEALING AND MIRACLES OF JESUS I

#### .5 Unit

As Catholics we have a long tradition of praying for the sick, albeit at a distance, but most of us have never learned to pray with a sick person, nor do we have a strong expectation that the person we pray for will actually get well. This course is designed to introduce students to the continuing healing, saving, liberating ministry of Jesus on Earth and how directly involved we are with Him in his ministry to others. Students will learn a step by step way of praying for others, the healing effects of the sacraments, and how to recognize and utilize the gifts of the Spirit.



## **THEOLOGY**

Grade(s): 11

Prerequisites: Successful completion of Theology 10/enrollment in Grade 11 for new students

## 045. HEALING AND MIRACLES OF JESUS II

#### .5 Unit

This course introduces students to the ministry of healing in the church. Through this course, students should develop an awareness of Christ's healing presence in the world today. Students will discover that they are both recipients and instruments of God's healing love. The study examines the ministry of Jesus and relates it to today's needs. 'Jesus is the same yesterday, today and forever.'

Grade(s): 11

Prerequisite: Successful completion of Healing and Miracles of Jesus 1/enrollment in Grade 11 for new students

#### 061. THE GOSPEL OF LUKE

#### .5 Unit

Called the most beautiful book ever written, Luke begins by telling us about Jesus' parents, the birth of His cousin, John the Baptist, Mary & Joseph's journey to Bethlehem, where Jesus was born in a manger, and the genealogy of Christ through Mary. Jesus' public ministry reveals His perfect compassion and forgiveness through the stories of the prodigal son, the rich man and Lazarus, and the Good Samaritan. As with the other two synoptic gospels, Matthew and Mark, Luke's purpose is to reveal the Lord Jesus Christ and all He "began to do and to teach until the day he was taken up to heaven" (Acts 1:1-2). Luke's gospel is unique in that it is a meticulous history consistent with Luke's medical mind, often giving details the other accounts omit. Luke's history of the life of the Great Physician emphasizes His ministry to, and compassion for, Gentiles, Samaritans, women, children, tax collectors, sinners, and others regarded as outcasts in Israel. Students will be able to explain how Luke's Gospel calls on us to care for others, identify the intended audience of Luke's gospel, and demonstrate an understanding of the of the genealogy of Jesus as presented in this Gospel.

Grade(s): 12

Prerequisite: Successful completion of Miracles & Healing of Jesus I & II/enrollment in Grade 12 for new students

### 030. THE ACTS OF THE APOSTLES

#### .5 Unit

The book of Acts is the intended sequel to the Gospel of Luke, showing how the new community of faith applied Christ's teachings to life and how they proclaimed His message throughout the world. In this course, students will complete an exegetical study of the book of Acts by focusing on the biblical theology of the book, the historical background of events, and the theological emphasis of the early church. The goal of the course is to enable students to articulate the message of Acts in ways that are both Biblically accurate and contemporaneously relevant.

Grade(s): 12

Prerequisite: Successful completion of Miracles & Healing of Jesus I & II/ enrollment in Grade 12 for new students



## **ENGLISH**

It is the goal of the English Department to help students develop into critical thinkers, eloquent speakers, and analytic writers who are well equipped to participate in the community. Our hope and desire is to nurture a love of both literature and discourse in our students. Our intent is to foster creative thinking and expression and to create a community of articulate readers, writers, and speakers. English vocabulary and grammar, research techniques, technological resources, mass media, and public speaking will be part of required coursework. The canon of literature studies will be a combination of "classics" and carefully chosen contemporary works. In preparation for college and the business world, students will read difficult texts, understand key disciplinary concepts, and develop strategies for responding critically to new information.

### 107. GRADE 7 ENGLISH LANGUAGE ARTS

This course is designed to build on the skills students have been developing in 5th and 6th Grade, and emphasize all aspects of the New York State Standards for the teaching of English Language Arts. Vocabulary development is an important part of this course. Development of expository, descriptive, narrative, and persuasive writing skills is included, along with a focus on the writing process (pre-writing, drafting, editing, etc.). Students will combine inference skills with relevant, text-based details to create valid claims. Students follow the CEA formula—state a Claim, support the claim with Evidence, and support the evidence with Analysis. Technological and media literacy will be developed through the use of chromebooks and projects. Also part of the course is the Independent Reading Program, which encourages students to explore different genres during recreational reading and analyze and report on the books they have chosen. Assessment is frequent and varied in type, including both objective and essay tests, projects, homework, and class participation. Students will improve reading, writing, listening, and speaking skills in preparation for college and career readiness. This course will help them to develop successful study skills and will increase their exposure to and awareness of available literature for recreation, study, and enrichment.

Grade(s): 7

### 108. GRADE 8 ENGLISH LANGUAGE ARTS

This course is similar in structure to English 7. It will build on the skills students have been developing and hone those skills in preparation for what they will encounter as freshmen in high school. This course emphasizes all aspects of the New York State Standards for the teaching of English Language Arts, in preparation for the NYS ELA Exam. Included in the curriculum are reading, writing, speaking, and thinking within the various literary genres. Practice of expository, descriptive, narrative, and persuasive writing skills is included, with a focus on the writing process (pre-writing, drafting, editing, etc.). Students are asked to more intensely analyze what they have read in their writing and will combine inference skills with relevant, text-based details to create valid claims. Students follow the CEA formula - state a Claim, support the claim with Evidence, and support the evidence with Analysis. Students will learn to make inferences then support their claims using evidence from supporting texts. Technological and media literacy will be developed through the use of chromebooks and projects. Also part of the course is the Independent Reading Program, which encourages students to explore different genres during recreational reading and analyze and report on the books they have chosen. Assessment is frequent and varied in type, including both objective and essay tests, projects, homework, and class participation. Students will improve reading, writing, listening, and speaking skills in preparation for high school, as well as for college and career readiness. This course will help them to develop successful study skills and will increase their exposure to and awareness of available literature for recreation, study, and enrichment.

Grade(s): 8



## **ENGLISH**

### **109. ENGLISH 9**

### 1 Unit

This is an introductory course that emphasizes all aspects of the New York State Common Core Standards for the teaching of English Language Arts. Included in this curriculum are reading, writing, listening, speaking, and thinking about various literary genres such as short stories, dramas, poetry, and novels. Vocabulary development is an important part of this course. Introduction to expository, descriptive, narrative, and persuasive writing is included. Technological and media literacy is developed through the use of school-supplied Chromebooks. Recreational reading and creative writing are encouraged and are frequently required as part of coursework. Regular journal writing is also assigned. Assessment is frequent and varied in methodology, including objective and essay tests, individual and group projects, research projects, class presentations, literary dramatizations, and original creative writing. Students will improve critical reading and writing skills, develop academic and grade-level vocabulary, and develop use of evidence-based claims when writing and speaking.

Grade(s): 9

### 120. ENGLISH 10

#### 1 Unit

The purpose of this course is to build critical reading and analytic writing skills in preparation for the NYS English Language Arts Common Core Exam and to endeavor to increase the skills needed in college and future careers. This course offers enrichment in the skills that are a focus during Junior year. Our topics for the year will include both relevant contemporary and historical issues that offer us the opportunity to explore a wide range of texts from poetry and novels to long non-fiction works, essays, and documentaries. Students will develop critical reading and analytic writing skills, develop academic and grade-level vocabulary, and will use appropriate, sophisticated, and varied evidence-based claims to support arguments when writing or speaking.

Grade(s): 10

Prerequisite: Successful completion of English 9

### 122. ENGLISH 10 HONORS

#### 1 Unit

The purpose of this course is to build critical reading and analytical writing skills in preparation for the English Language Arts Common Core Exam and the 11 and 12 AP English courses. Throughout the course, students will read a variety of texts (novels, poetry, and short stories) ranging from classics to carefully selected contemporary works which comment on relevant contemporary and historical matters, offering the opportunity to explore a wide range of issues which concern us as humans and Christians. Students will also study nonfiction works – essays, articles, and other informational documents – which support these works and enhance our understanding of them and their themes. Students will express their understanding of these texts through a variety of formal and informal written assessments. The students will also engage in Independent Reading throughout the year to help improve their general reading fluency. They will also complete a research project utilizing MLA format, scaffolding research skills for 11th grade.

Grade(s): 10

Prerequisites: 94% average in English 9, 85% on English 9 final exam, and teacher recommendation. Final admission into the Honors program is at the discretion of the English Department. A summer reading assignment is required.



## **ENGLISH**

#### **130. ENGLISH 11R**

### 1 Unit

The purpose of this course is to build critical reading and analytical writing skills in preparation for the English Language Arts Common Core Exam at the end of the year and for their college career. Throughout the course, students will read a variety of texts, (novels, short stories, poems) offering the opportunity to explore a wide range of issues which concern us as humans and Christians. Students will also study nonfiction works – essays, articles, and other informational documents – which support these works and enhance our understanding of them and their themes. Students will express their understanding of these texts through a variety of formal and informal written assessments. The students will also engage in Independent Reading throughout the year to help improve their general reading fluency. They will also write a research paper on a topic of their choice. Students will writing a research paper utilizing MLA format and will continue to develop their reading, writing, listening, and speaking skills. The final assessment for this course is the New York State Regents Examination in English Language Arts.

Grade(s): 11

Prerequisite: Successful completion of English 10

### 132. AP ENGLISH 11: LANGUAGE & COMPOSITION

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

This college-level course will explore writing from a variety of periods and a diverse range of authors. Focus will be on preparation for the Advanced Placement Language and Composition Exam through study, interpretation, discussion and composition of mainly non fiction narrative, descriptive, argumentative and expository works. As the course is organized according to the requirements and guidelines of the AP English and Language Course Description, students should expect and be comfortable with a challenging workload that includes substantial reading and writing assignments, frequent participation in class discussions surrounding a multitude of issues, current events, and high-level texts, and high performance expectations. Students will master analytic and argumentative writing, develop discriminating rhetorical analysis skills for literary study, and develop a collegiate vocabulary and writer's voice. This course will prepare students to take the AP English Language and Composition Exam and the New York State Regents Examination in English Language Arts.

## Grade(s): 11

Prerequisites: Grade 11, 94% average in English 10 or English 10H, 85% on English 10 or 10H final exam, and teacher recommendation. Final admission into the AP program is at the discretion of the English Department. A summer assignment is required and admission into the course is contingent upon the successful completion of this assignment.

#### 140. ENGLISH 12

### 1 Unit

English 12 is year-long writing intensive course designed to improve critical thinking, reading, and writing skills through guidance in writing the thesis-driven essay. Students develop strategies for turning their experience, observations, and analysis into evidence suitable for academic writing. Emphasis is on writing the short, focused, concretely-developed college paper. This course will also further enable students to become skilled readers of a wide range of literature, including prose, poetry, short stories, and essays. Students are expected to read and respond to a variety of texts independently, in group discussion, and in writing. All facets of language arts - listening, speaking, reading, writing - will be covered. The study of language in use – grammar, mechanics, sentence structure, and usage will be incorporated into this yearlong course as well. The overall goal of this course



## **ENGLISH**

is to prepare students for college-level analysis and writing while engaging them in authentic texts and topics.

Grade(s): 12

Prerequisite: Successful completion of English 11R or AP Language and Composition

## 143. AP ENGLISH 12: LITERATURE & COMPOSITION

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

This college-level course will facilitate reading and understanding a broad and challenging range of predominantly fiction literature. Through close reading and frequent writing, students are expected to heighten their critical reading and analytical skills and communicate effectively in both writing and speech. Compositions will include expository, analytical, personal and argumentative pieces. The course will prepare students to take the AP English Literature and Composition Exam. Students will also write a 10 page research paper with a focus on in-text documentation and MLA citation.

Grade(s): 12

Prerequisites: 85% on NYS Comprehensive English Regents Exam, 94% average in English 11 or AP English 11: Language and Composition, or teacher recommendation. Final admission into the AP program is at the discretion of the English Department. A summer assignment is required.

### 153. EFFECTIVE SPEAKING

#### .5 Unit

This course will study the art of effective speaking and seek to make students more effective speakers. Techniques in speaking will be examined along with great speeches. Students will give public speeches seeking to inform, persuade and celebrate; take part in practice interviews; and learn the art of speaking in groups. The course will empower students to become more confident and effective in their interactions with others and prepare them for success in the professional world.

Grade(s): 11-12 Prerequisites: none

### 163. CREATIVE WRITING (offered on a rotating basis, not offered 2019-20)

### 1 Unit

Creative Writing explores the elements of fiction writing, including narrative, scene, character, point of view, and dialogue, as well as the habits necessary to grow as a writer. Students will read a wide variety of short stories alongside essays on writing craft (On Writing by Stephen King; Walking on Water, by Madeleine L'Engle, Zen and the Art of Writing, by Ray Bradbury, and others), in order to develop a language for talking about how fiction works. Frequent writing exercises will be assigned, aimed at teaching the different aspects of fiction. By the second quarter, students will begin generating work to offer for class critique in a workshop setting. Critiquing fellow students' work is a requirement. At minimum, students will be expected to complete at least two short stories at least 5,000 words in length for midterm and final projects. Also, students will meet regularly with published writers to learn more about the writing process and the publishing industry.

Grade(s): 9-12

Prerequisites: 85 English average in previous English course.



## **ENGLISH**

# 164. WRITING THE NOVEL (offered on a rotating basis, not offered 2019-20) 1 Unit

During this course, students will actively engage in daily, ongoing writing tasks that will address different aspects of storytelling, most specifically in writing the novel. At the end of each month, a "chapter" of their story will be due, culminating in a novel, novella, or novelette as part of their final exam. Students will workshop and offer critique to each other, and regular tasks will be given to expose students to different kinds of style, structure, and voice. Texts we'll be reading: Write Good or Die, by Scott Nicholson; The Complete Idiot's Guide to Writing a Novel, by Tom Monteleone; Aspects of the Novel, by E. M. Forster, and at least three novels.

Grade(s): 9-12

Prerequisites: 88% average in previous English course or approval of the instructor

# 170. ANALYSIS OF FILM (offered on a rotating basis, offered 2019-20) .5 Unit

Students will examine the narrative form as interpreted through the medium of film. Students will develop verbal and visual analytical skills through viewing, discussing, researching, and writing on a variety of films. Students will formulate an understanding of film's historical progression, its unique language, its techniques, and its conscious and subliminal effects upon personal and public opinion. At the end of the course, students should be able to recognize the role editing, cinematography, art direction, and sound play in a well-crafted film.

Grade(s): 11-12

Prerequisites: 90% overall average in English courses or teacher recommendation

## **SOCIAL STUDIES**

The Social Studies Department believes social studies is the study of human social relationships - local, national and international - both past and present, with preparation for the future. The program rests on the assumption that American society depends upon citizens whose decisions and actions reflect basic Christian and democratic values. Realizing that our society is characterized by cultural pluralism, the department exposes the student to knowledge and skills that will aid in forming Christian moral and social attitudes and foster respect for humankind within and outside the American culture.

### 207. GRADE 7 SOCIAL STUDIES: U.S. HISTORY

Social studies content in grade 7 is a chronological examination of United States history. Grade 7 curriculum concentrates on early Native peoples and early American experience through the Civil War Era. New York State history is infused throughout the coursework. It studies/discovers political, geographic, economic, and social trends in United States history. It provides a solid content base in American history, helping students develop an understanding of the rights and duties for participatory citizenship. It will provide students a model for the global connections they will discover in the grades 9 and 10 social studies program. Students will develop reasoning skills necessary to extend inquiry, expand knowledge, and understand how the past is studied and interpreted.

Grade(s): 7

### 208. GRADE 8 SOCIAL STUDIES: U.S. HISTORY

Social studies content in grade 8 continues with the chronological examination of United States history that was begun in Grade 7. Grade 8 curriculum concentrates on United States history from the mid-19th century to the most recent period. New York State history is infused that uphout the coursework. It studies/discovers political,



## **SOCIAL STUDIES**

geographic, economic, and social trends in United States history. It provides a solid content base in American history, helping students develop an understanding of the rights and duties for participatory citizenship. It will provide students a model for the global connections they will discover in the grades 9 and 10 social studies program. Students will develop reasoning skills necessary to extend inquiry, expand knowledge, and understand how the past is studied and interpreted.

Grade(s): 8

### 209. GLOBAL HISTORY & GEOGRAPHY 1

#### 1 Unit

This is the first part of the Global Studies curriculum in which all parts of the world will be studied except the United States and Canada. Global History and Geography 1 covers the history of Europe, Asia, Africa, and Latin America from the earliest hunter-gatherer societies through the end of the seventeenth century. This course will mostly be chronological in nature. The modern world will be covered in the second year of the course. In this course, students will become familiar with the development and characteristics of civilization. They will master map skills, relationships relevant to time periods, and cause-effect relationships inherent in the flow of history. Students will be able to interpret the development of different methods of logic and critical thinking as a result of the various geographic, historical, and socio-economic events within each culture.

Grade(s): 9

#### 220. GLOBAL HISTORY & GEOGRAPHY 2R

#### 1 Unit

This is the second part of the Global Studies curriculum. It picks up where Global History and Geography 1 concludes, which is at the end of the seventeenth century. The course is chronological in nature. It examines the history of Europe, Asia, Africa, and Latin America from 1700 to the present. Students will develop an understanding and explanation of current issues and events throughout the world, will be aware of how the nations of the world are interdependent in relationship to current issues and events, and will understand the effects of religion, economics, nationalism, imperialism, militarism, and balance of power on much of the history of the western world in the past three centuries. Students will take the Regents Exam in Global History & Geography upon completion of the course.

Grade(s): 10

Prerequisite: Successful completion of Global History & Geography 1

### 230. UNITED STATES HISTORY AND GOVERNMENT R

#### 1 Unit

United States history is the history of a great experiment in representative democracy. The basic principles and core values expressed in the Declaration of Independence became the guiding ideas for our nation's civic culture. U.S. history since the Declaration of Independence has witnessed continued efforts to apply these principles and values to all people. Adoption of the U.S. Constitution codified these principles but, as the history of our nation shows, that document and its amendments represented on a first step in achieving "liberty and justice for all". The core curriculum is organized into seven historical units. Each unit lists content, concepts, and themes, and connections that teachers will use to organize classroom and plan for assessment. Students will gain knowledge of the structure and function of the United States' government, will develop an understanding of the rights and duties of the government and the citizens, and will demonstrate an understanding of the United States' role and influence in international affairs. The final exam for this course is the Regents Exam in United States History and Government.

Grade(s): 11

Prerequisite: Successful completion of Global 1 and Global 2R



## **SOCIAL STUDIES**

#### 232. AP UNITED STATES HISTORY

### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

The United States History AP course is the standard U.S. History survey course, usually given in the second year of college. The course covers the period from colonization to the present time. The emphasis is on the presentation of factual knowledge and critical analysis. The latter should be of a degree expected of a college sophomore. Mature reading comprehension and writing skills are essential. Students will develop critical analytical skills in responding to a series of thematic and document-based essay questions relating to topics in United States history. Students will demonstrate an understanding of key themes and turning points in United States history and an understanding of the framing of the constitution and its response to challenges in American society. The student will be prepared to take the AP Exam in United States History in May. The student will also be prepared for the Regents Exam in United States History and Government.

Grade(s): 11

Prerequisites: Successful completion of Global 1 and Global 2R; an average of at least 90 in AP World History or 92 in Global 2, plus a Global History and Geography Regents grade of 92 or above; Grade of a 92 or above in English. There is a summer reading assignment and this assignment will be the basis of a test in September.

#### 244. ECONOMICS

#### .5 Unit

This course is one part of the mandated fourth credit in social studies. It is designed to give the student a better understanding of the role and importance of economics and economic systems in our national and international society. Upon completion of this course, students will be able to discuss methods of measuring the economy and the factors that affect it. Students also will be able to describe the role of the United States in the world economy.

Grade(s): 12

#### 245. PARTICIPATION IN GOVERNMENT

### .5 Unit

This course is one part of the mandated fourth credit in social studies. This course will emphasize the interaction between citizens and government at all levels -- local, state, and federal. The development of student participation in the process of government is encouraged. Students will understand the importance of citizen participation in a democratic society, identify and analyze policy issues, and identify the role of values in influencing public policy decisions.

Grade(s): 12

# 252. HISTORY OF BASEBALL AND AMERICA (offered on a rotating basis, offered in 2019-20) 1 Unit

This course is designed to study the influence of baseball in American history. Major focus will be placed on the Black Sox scandal, Jackie Robinson and the steroids era. Students will be expected to write a well researched paper on baseball's influence on the United States. Throughout the duration of this course, students will demonstrate the influences of baseball on American society, gain a greater understanding of how historians work with source documents, and describe the way games can influence a culture.

Grade(s): 11, 12

Prerequisites: Complete Global Studies 2R or AP World History with an average of 80 or higher.



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#### 254. PSYCHOLOGY

### .5 Unit

This course will examine foundations in Psychology. Theories of personality development, abnormal psychology, methods of treating psychological disorders, gender and psychology as well as education and learning will be examined. The course will enable students to have a better understanding of their own development as a person and seek to develop empathy towards the challenges others face.

Grade(s): 11-12 Prerequisites: none

## 255. LEGAL ISSUES (offered on a rotating basis, not offered in 2019-20)

#### 1 Unit

This course is designed to be an introduction to the law and its practical applications in our daily lives. This course begins with discussion of the legal system and finishes with discussions of important Supreme Court Cases dealing with controversial Constitutional topics such as freedom of speech, press, rights of accused, and other topics.

Grade(s): 11, 12

#### 262. AP WORLD HISTORY

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

This college-level course is offered to qualified students who seek the challenge of learning about world cultures beyond the NYS Regents level. The purpose of the course is to have students develop a greater understanding of the evolution of global processes and contacts. It will study, in depth, the nature of changes in cross-cultural settings and focus on the comparisons of major societies throughout world history beginning roughly around the year 1200 CE. The course encourages historical thinking skills and the analysis of primary texts; students will be taught the contextual and analytical processes needed to use unabridged sources and documents effectively. Essay development and writing skills are stressed. Major assignments include a summer preparatory project, a series of in -class presentations, and supplemental readings in addition to class discussion and lecture-based learning. This course prepares students to take the AP World History exam in early May and the NYS Regents exam in Global History and Geography in June.

Grade(s): 10

Prerequisites: Average of 92 or above in both Global 1 and English 9 and teacher recommendation.

#### **263. AP ECONOMICS**

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

This course is designed to prepare students to take AP exams in Microeconomics and Macroeconomics. Topics of this course include scarcity, supply and demand, fiscal policy, monetary policy and more basic topics in Economics. Students will critically analyze government policies and individual decision making. This course may be taken in place of Participation in Government and Economics or in addition to these courses or AP European History. This course prepares students to take the AP Exams in Microeconomics and Macroeconomics.

Grade(s): 12

Prerequisites: Average of a 92 or better in United States History and Government R or a 90 in AP U.S. History, an average of an 88 or greater in Algebra 2 and teacher recommendation. A summer reading assignment is required.



## **SOCIAL STUDIES**

### 264. AP EUROPEAN HISTORY

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

The Advanced Placement European History course is a study of European civilization and its influence on the modern world from 1450 CE to the present day. Topics include the political, social, intellectual, and technological evolution of European states within this time period. The curriculum requires extensive college-level outside reading and the in-depth analysis of primary historical sources, as well as class discussion and a lecture-based style of learning. Major assignments include summer preparatory readings, a series of in-class presentations, and a "special" final project determined by student interest. This course may be taken in place of or in addition to Economics and Participation in Government and prepares students to take the AP Exam in European History in May.

Grade(s): 12

Prerequisites: Average of a 90 in Social Studies and teacher recommendation.

## **MATHEMATICS**

The Mathematics Department strives to encourage the development of the student's ability to organize and reason logically. The program promotes math skills and math in everyday life, the development of marketable skills, and the use of graphing calculators. The math courses encourage abstract thinking, critical thinking, reasoning and inquiry. The integration of books, charts and graphs are used to promote department objectives in the mastering of logic, algebraic, geometric and trigonometric skills and conceptual mathematics. The Regents courses will make all the changes necessary to conform to the revised New York State curriculum standards.

Note: Students are required to use Texas Instruments 83-Plus or 84-Plus graphing calculators in ALL Regents level Math courses.

#### 307. GRADE 7 MATHEMATICS

Students will apply skills learned in arithmetic to larger number groups as well as to real-life problems in the areas of probability, percentages, statistics, algebra, geometry and graphing in the coordinate plane. Students will develop knowledge of number sense and operations, understand and use basic knowledge of algebraic expressions and geometric relationships, and develop tools to apply mathematics to real-life scenarios. This course follows the New York State Common Core curriculum.

Grade(s): 7

### 375. GRADE 7 ADVANCED MATHEMATICS

This course combines 7th and 8th grade mathematics curriculum. Students will apply skills in arithmetic to real-life problems. Students will also develop further knowledge of statistics and geometry. This course is designed to prepare students for advancement into Algebra I.

Grade(s): 7



## **MATHEMATICS**

Prerequisites: Above average math ability based on teacher recommendation and 5th & 6th Grade NYS math assessment scores of 3 or greater. Scores will be reviewed in the summer to verify eligibility for this course and progress will be reviewed after each quarter throughout the year for continued placement.

#### 308. GRADE 8 MATHEMATICS

Students will continue to apply skills learned in arithmetic to problems from the real world, especially in the areas of statistics and geometry. Students will develop such skills as finding the area of plane figures, determining the surface area of geometric solids and calculating square roots. This course follows the New York State Common Core curriculum.

Grade(s): 8

### 309. PRE-ALGEBRA I

#### 1 Unit

This course is intended for the student who will benefit from additional instructional time and teacher intervention. This course includes selected topics from Real Numbers, Functions, Graphing, and Statistics. Students will develop a strong foundation of math skills and concepts that will help ensure success in Algebra 1. At the conclusion of this course, students will not take the Algebra 1 (Common Core) Regents Exam. Students will take a school final exam reflecting the topics covered during the year. Students taking Pre-Algebra I will be recommended to take Algebra I the following year.

Grade(s): 9

Prerequisite: Teacher recommendation

#### 316. ALGEBRA I

#### 1 Unit

Algebra I is the first course in the three-course New York State Math Regents sequence aligned with Common Core. This course contains four conceptual categories: Number & Quantity, Algebra, Functions, and Statistics & Probability. Students will learn to see structure in expressions, perform arithmetic on polynomials and rational numbers, analyze, build, and interpret linear/exponential/quadratic functions, create/build equations and inequalities, and interpret categorical and quantitative data. Students are moving from concrete computational focused math involving numbers to the abstract world of mathematics involving variables and relationships. Students will develop proficiency in basic algebraic and problem solving skills and will demonstrate competence in the use of the graphing calculator. This course culminates with the Algebra I (Common Core) Regents Examination.

Grade(s): 8-12

Prerequisite: Average/above average math ability based on teacher recommendation. Please note for 8th grade students: completion of Grade 7 Advanced Math does not guarantee recommendation for Algebra. Student must demonstrate mastery of Grade 7 Advanced Math curriculum.

### 329. GEOMETRY WITH ALGEBRAIC APPLICATIONS

#### 1 Unit

This is a year-long, non-Regents course preparing the student for entrance into the Regents-level Common Core Geometry. This is predominantly a Geometry course that also includes selected topics from Algebra as it applies to geometry concepts. This course is designed to develop a strong foundation of skills that will help ensure success in future mathematics courses. For students who have completed Pre-Algebra and Algebra 1, this course will serve as the 3rd course in the three year math sequence required for high school graduation. This course culminates with



## **MATHEMATICS**

local exam.

Grade(s): 9-12

Prerequisites: A course grade between 65-79 in Algebra I and math department recommendation

331. GEOMETRY

1 Unit

Geometry is the second course in the three-course New York State Math Regents sequence aligned with Common Core. This course includes an in-depth analysis of plane, solid, and coordinate geometry as they relate to both abstract mathematical concepts and real-world problem situations. Topics include congruence and similarity, right triangles, trigonometry, circles and geometric properties, measurements and dimension. Emphasis is placed on developing critical thinking skills as they relate to logical reasoning and argument. The course culminates with the Geometry (Common Core) Regents Examination.

Grade(s): 9-12

Prerequisites: A course grade of 80 or above in Algebra 1 and math department recommendation

### 336. ALGEBRA II

#### 1 Unit

Algebra II is the third course in the three-course New York State Math Regents sequence aligned with the Common Core. This course builds upon and does a more in-depth look at the concepts of Algebra I and extends the student's understanding of functions to include polynomial, rational and radical functions. Algebra II also covers the complex number system, expressing geometric properties with equations, trigonometric functions, making inferences and justifying conclusions, conditional probability, and using probability to make decisions. Students will develop proficiency in advanced algebraic, trigonometric and statistical analysis and problem-solving. Upon successful conclusion, this course prepares students for pre-calculus. This course culminates in the Algebra II (Common Core) Regents Examination.

Grade(s): 9-12

Prerequisites: Successful completion of Geometry

### 343. PRE-CALCULUS

### 1 Unit

This course is a graphical approach to expose the student to a variety of advanced mathematical concepts, such as number systems, linear and quadratic expressions, special functions, limits, basic differentiation and integration, algebra of vectors and matrices, theory of equations, trigonometric functions and identities, and some elements of solid geometry.

Grade(s): 10-12

Prerequisites: A grade of an 80 on Algebra I, Geometry, and Algebra II Common Core Regents Examinations AND math department recommendation

### 365. AP CALCULUS

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. Students will learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and



## **MATHEMATICS**

how to make connections amongst these representations. Students will learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. A graphing calculator (TI-84+) is highly recommended.

Grade(s): 11, 12

Prerequisites: Pre-Calculus (taken previously or concurrently), a grade of a 90 in Pre-Calculus, and math department recommendation

### 361. AP STATISTICS (tentative for 2019-20)

### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

The purpose of this Advanced Placement course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will explore four broad conceptual themes: data, sampling and experimentation, probability and simulation and statistical inference. This course prepares students to take the AP Exam in Statistics in May.

Grade(s): 11, 12

Prerequisites: A grade of a 90 in Algebra 2 or Pre-Calculus or math department recommendation

#### 344. MATH APPLICATIONS

#### 1 Unit

This course is designed to prepare students for life after high school — whether it be college or career. The topics of this course include financial planning and budgets, paychecks, basic business functions, loans, taxes, basic banking, consumer credit, insurance, retirement accounts, mortgages, and vehicle financing.

Grade(s): 12

Prerequisite: Successful completion of Geometry with Algebraic Applications or Geometry or recommendation of math department

### 346. HIGH SCHOOL CALCULUS AND STATISTICS

#### 1 Unit

This comprehensive course consists of 20 weeks of calculus and 20 weeks of statistics, with the intention of preparing students for math at the collegiate level by introducing them to terminology and applications of each course. Algebraic concepts from previous math courses will be reviewed and extended as necessary. In calculus, students will delve into limits, derivatives and integrals. In statistics students will learn about statistical symbols and formulas, descriptive statistics, review statistical tables, as well as discrete and continuous probability distributions. Students should come away from this course with a better understanding of the language and use of statistics and calculus enabling them to solve problems that they will encounter in college courses. A graphing calculator (TI 83+ or TI 84+ preferred) is required for this course.

Grade(s): 12

Prerequisite: Successful completion of Algebra 2 or teacher recommendation. Completion of Precalculus is recommended but not required



## **SCIENCE**

The Science Department endeavors to add an important dimension to the development of the whole person. The scientific approach is used in order to inculcate scientific skills, refine methods of organization as well as manual dexterity, add to the student's fund of knowledge so that the student may learn to make more intelligent judgments regarding the universe in which he/she lives, and increase scientific literacy with respect to many questions in science, especially those with moral implications.

#### 403. GRADE 7 HEALTH

Students in the 7th grade will gain knowledge and an understanding of healthy development, healthy behaviors, and necessary life skills that lead to high quality of life. Topics and units will include the body systems, character education, physical fitness, nutrition, drugs, alcohol, tobacco, and HIV/AIDS education. Students will analyze various influences that affect health and wellness. Emphasis will be placed on thinking critically and making healthy choices.

Grade(s): 7

### 404. GRADE 8 HEALTH

Students in the 8th grade will gain knowledge and an understanding of healthy development, healthy behaviors and necessary life skills that lead to a high quality of life. Topics and units will include disease prevention, body systems, character education, teen sexuality, self-esteem issues, violence and environmental health. Emphasis will be placed on making good decisions and being a positive influence throughout one's life. Students will exhibit the ability to apply knowledge learned in this class to individual behaviors and situations.

Grade(s): 8

#### 407. GRADE 7 SCIENCE: LIFE SCIENCE

Students will explore life science by participating in a variety of activities and discussions that allow them to discover by inquiry critical concepts and apply the knowledge they have constructed to their own lives. Throughout the program, students will be building critical skills necessary for lifelong learning. Students will use and apply scientific concepts, principles, and theories to the natural world. They will acquire lab skills through the use of hands-on activities and the integration of technology as a means of gathering, processing, and displaying data. The units of study include: scientific method, structure and function of cells, tissues, organs, and organ systems, heredity and evolution, diversity of life, ecology, and the human body.

Grade(s): 7

### 406. GRADE 7 ADVANCED SCIENCE: PHYSICAL & LIFE SCIENCE

This course is designed for the scientifically oriented student, to provide a broad understanding of the fundamental principles of physical and life sciences. Students will use and apply scientific concepts, principles, and theories to the physical and biological world. Through inquiry students will discover the physical and biological world by formulating hypotheses and drawing conclusions. Students will acquire lab skills through the use of hands-on activities and integration of technology as a means of gathering, processing, and displaying data.

Grade(s): 7

Prerequisites: Grade of 93 or higher in Grade 6 science AND teacher recommendation. Concurrent enrollment in Grade 7 Advanced Mathematics.

### 408. GRADE 8 SCIENCE: PHYSICAL SCIENCE

Students will explore physical science by participating in activities and discussions that allow them to discover by inquiry critical concepts and apply the knowledge they have constructed to their own lives. Throughout the



## **SCIENCE**

program, students will be building critical skills that will be available to them for lifelong learning. Students will take a constructivist approach to science investigation and discover the physical world by formulating hypotheses and drawing conclusions. Students will also acquire lab skills through the use of hands-on activities and integration of technology as a means of gathering, processing, and displaying data. The units of study include: scientific method, energy and motion, matter, interactions of matter, waves, light and sound and electricity and magnetism. **Grade(s):** 8

### 409. THE PHYSICAL SETTING: EARTH SCIENCE R

#### 1 Unit

This course focuses on topics related to the Earth, its properties, and its characteristics. The student will study astronomy, weather, erosion and deposition, the dynamic crust, rock and mineral formation, energy in Earth processes, dimensions of the Earth, glacial geology, insolation and the seasons and landscape development, concentrating on New York State geology and history. Students will use and apply scientific concepts, principles, and theories pertaining to the physical setting and recognize the historical development of ideas in science. They will use mathematical analysis and scientific inquiry to pose questions, seek answers, develop solutions while accessing, generating, processing information using technology. At the end of this course, the student will take a lab skills assessment test and the NYS Physical Setting/Earth Science Regents examination. Laboratory requirements for a Regents science course must be satisfied in order to sit for the exam.

## Grade(s): 8-12

Prerequisites for 8th graders only: Grade of 93 or higher in Grade 7 Advanced Science and teacher recommendation. Concurrent placement in Algebra I or a higher level mathematics. Please note: Completion of Grade 7 Advanced Science does not guarantee placement into Earth Science. Student must demonstrate mastery of Grade 7 Advanced Science curriculum to be recommended for placement into Earth Science.

#### 421. THE LIVING ENVIRONMENT: BIOLOGY R

### 1 Unit

This course is designed for the scientifically oriented student, to provide a broad understanding of the fundamental principles of biology. The course includes the study of current science findings and their moral implications. The course enables the student to become more familiar with himself/herself and the environment. Laboratory investigations, organization and critical thinking are required. At the end of this course, the student will take the NYS Living Environment Regents examination. Laboratory requirements for a Regents science course must be satisfied in order to sit for the exam.

Grade(s): 9-12

Prerequisite: Successful completion of Regents Earth Science

#### 431. THE PHYSICAL SETTING: CHEMISTRY R

## 1 Unit

Throughout the course of the year, students will discover chemical relationships pertaining to the gas laws, stoichiometry and nomenclature, nuclear chemistry, chemical kinetics and equilibrium, atomic and molecular structures, acid-base chemistry and solutions and organic chemistry. Students will demonstrate an understanding of chemical symbols and relationships and will be able to identify the major contributors to the field of chemistry. This is a laboratory-based course, so many labs will be performed as required by the state. Students will be able to perform experiments in an efficient and competent manner. At the end of this course, the students will take the NYS Physical Setting/Chemistry Regents examination. Laboratory requirements for a Regents science course must



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be satisfied in order to sit for the exam.

Grade(s): 10-12

Prerequisites: Successful completion of Algebra 1, The Living Environment: Biology R, and The Physical Setting: Earth Science R OR The Physical Setting: Physics R. Grade 10 students must be concurrently enrolled in Algebra II or a higher level mathematics course and recommendation of department

#### 435. THE PHYSICAL SETTING: PHYSICS R

#### 1 Unit

This course examines the principles of physics, following the NYS syllabus. Coverage includes the use of vectors, descriptions of motion, work and energy, gravitation, electricity and magnetism, waves, optics and introduction to quantum concepts. Students will learn about the concepts and theoretical basis for physical phenomena studied in this course. At the end of this course, the students will take the NYS Physical Setting/Physics Regents examination. Laboratory requirements for a Regents science course must be satisfied in order to sit for the exam.

Grade(s): 11, 12

Prerequisites: Successful completion of or concurrent enrollment in Algebra II. Successful completion of The Living Environment: Biology R and The Physical Setting: Earth Science R.

### 444. ENVIRONMENTAL SCIENCE

#### 1 Unit

The intent of this course will be to investigate all of the environments that we live in and the impacts we have on them. The main focus will be on Pollution, Sustainability and Ecology, as it pertains to individuals and the world. Students will demonstrate knowledge of laws that are in force that protect the environment. Students will learn about their part and place in our world and what they can do to improve it. They will explore the role industry can play in conserving natural resources and eliminating waste products.

Grade(s): 11, 12

Prerequisites: Successful completion of The Living Environment: Biology R and a Regents Physical Science

### 445. EMERGENCY MEDICAL SERVICES (EMS)

#### 1 Unit

The course is intended for students who plan to become an EMT as well as other health-care fields, such as medicine, nursing, etc. The EMS course offers the student real life experiences in health care coupled with the academic knowledge. Students will understand the importance of prehospital care in the overall treatment of patients admitted to the hospital through the emergency room. Students will demonstrate understanding of how to perform history and physical examinations, CPR, and transportation of patients. The textbook for the course is Emergency Care by Daniel Limmer. It is the same text used to teach students preparing to become EMT professionals. The completion of this course will not qualify the student to take the licensure examination for EMT certification, but it is an excellent preparation for any student who wishes to become an EMT. To be certified as an EMT the student must be 18 years of age by the end of the month in which the examination is given and must repeat this course at a local ambulance company.

Grade(s): 11, 12 Prerequisites: None

#### 447. FORENSIC SCIENCE

#### .5 Unit

This course is intended as an overview of the medico-legal investigation of death. The topics will include, but are



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not limited to, scene investigation, collection of physical evidence, gunshot wounds, blunt force trauma, drugrelated deaths, and expert witness testimony. Students will learn to perform basic investigative procedures such as fingerprint identification, hair and fiber analysis, document identification, blood typing, and handwriting analysis. The course syllabus will closely follow the course textbook *Criminalistics* by Richard Saferstein, supplemented by materials obtained from the Armed Forces Institute of Pathology and the College of American Pathology. Some of the materials presented will be from actual criminal cases. Students can receive college credit for this course from SUNY Broome through the Fast Forward Program.

Grade(s): 11, 12

Prerequisites: Successful completion of The Living Environment: Biology R with concurrent enrollment in or completion of The Physical Setting: Chemistry R and/or The Physical Setting: Physics R recommended

#### 449. HEALTH

#### .5 Unit

This required course covers all areas of health -- not just the physical, but also the emotional, mental, and spiritual aspects as well. The Curriculum will include such topics as memory skills and speed reading as well as infectious disease, mental health, alcohol and drug abuse, abstinence, the Catholic Church's views on abortion and birth control, Natural Family Planning, time management, cancer, suicide, CPR and child abuse.

Grade(s): 11, 12

Prerequisites: Successful completion of The Living Environment: Biology R

### 450. ANATOMY, PHYSIOLOGY, & DISEASE

#### .5 Unit

This course will provide a basic overview to the anatomical structures and physiology of the human body. Each body system will be discussed in terms of the major anatomical structures and function including how each system participates in homeostasis of the body. In addition, the course discusses selected major pathologies, including disease definitions and causes, signs and symptoms, diagnostic procedures, and possible treatments. Students will explore the structures, functions, and disease process of the human body and its systems and integrate the knowledge acquired in this course into a prospective health care related career. Finally, the course also attempts to discuss common issues and changes that occur in each body system through the lifespan. Students can receive college credit for this course from SUNY Broome through the Fast Forward Program.

Grade(s): 11, 12

Prerequisites: Successful completion of The Living Environment: Biology R

### 451. MEDICAL TERMINOLOGY

#### .5 Unit

This medical terminology course will focus on a step-by-step study of principles of medical word building, in order to help students to develop a basic knowledge of the extensive medical terminology used by health care practitioners. Students will acquire their knowledge through the study of prefixes, suffixes and root words, without ignoring proper pronunciation and spelling of these. For each body system, a brief review of anatomy and physiology will be provided. This course is geared towards students with an interest in enrolling in a healthcare related degree. Students can receive college credit for this course from SUNY Broome through the Fast Forward Program.

Grade(s): 11, 12

Prerequisites: Successful completion of The Living Environment: Biology R. Completion of or enrollment in Anatomy, Physiology & Disease is recommended but not required



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#### **452. SEMINAR IN HEALTH SCIENCES**

### .25 Unit, 1 Semester

This course will present an overview of the health science professions. The focus will be on both in-depth exploration of individual health careers and how these professions collaborate and interrelate. An introduction to professional behavior and cultural diversity will be included as well. The class will also help students to develop learning strategies to enhance academic success in health care careers. Students will attend this course 1-2 times in a 6 day cycle. Students can receive college credit for this course from SUNY Broome through the Fast Forward Program.

Grades: 10, 11, 12 Prerequisites: None

### 460. AP BIOLOGY

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

This course is designed for the college-bound student who may or may not be planning to major in the biological sciences or one of the natural sciences. Students will explore major biological concepts, including those of biochemistry. Students will use inductive reasoning and describe major investigations in important aspects of biology while demonstrating laboratory skills required of a first year college student. This is a first-year college course covering all aspects of biology. This course prepares students to take the AP Exam in Biology in May.

Grade(s): 11, 12

Prerequisites: 90% final average in The Living Environment: Biology R and The Physical Setting: Chemistry R and recommendation of department

#### 463. AP CHEMISTRY

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

This is a course designed for the serious science student and is taught as a college-level general chemistry course. It includes all of the topics from Regents Chemistry covered in greater detail, along with some molecular orbital theory and solid state crystal theory. Outside assignments include seminars at Binghamton University and participation in the Chemistry Olympiad. Students can receive college credit for this course from SUNY Broome through the Fast Forward Program. This course prepares students to take the AP Exam in Chemistry in May.

Grade(s): 11, 12

Prerequisites: 90% final average in The Living Environment: Biology R and The Physical Setting: Chemistry R and recommendation of department

### **465. AP ENVIRONMENTAL SCIENCE**

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

This course is designed to be the equivalent of a one-semester, introductory college course in environmental science. The goal of the course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems and to examine



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alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary; it embraces a wide variety of topics from different areas of study, yet there are several major unifying themes that cut across the many topics included in the study of environmental science. This course prepares students to take the AP Exam in Environmental Science in May.

Grade(s): 12

Prerequisites: 90% final average in both a Physical Science course and The Living Environment: Biology R and recommendation of department

### **468. COLLEGE PHYSICS**

#### 1 Unit

Physics includes the study of matter and motion, mass and energy. It tells you how and why things move. It is important for everyone from technicians to doctors to know why something happens. Problem solving skills that you learn in physics will help you in other courses, as will the skills in laboratory observation and analysis. Strong emphasis is placed on solving a variety of challenging problems. The subject matter in the first semester is mechanics and heat. The second semester covers electricity, magnetism, waves, light, optics, and modern physics. This course forms the first part of the college sequence that serves as a foundation for the student majoring in the physical sciences, engineering, or biology. Students can receive 8 college credits for this course from SUNY Broome through the Fast Forward Program. *This course receives a weighting of 1.15*.

Grade(s): 11,12

Prerequisites: 90% final average and 90 Regents Exam grade in The Living Environment: Biology R, The Physical Setting: Chemistry R, and Algebra ll; or permission by the instructor.

## LANGUAGES OTHER THAN ENGLISH

The general objectives of the SCC Languages Other Than English department are to teach students (1) to communicate in a language other than English, and (2) to appreciate and understand the cultural differences of people who communicate in languages other than English. The department's primary goal is to encourage students to continue their language study throughout their academic careers. Since many colleges and universities require some LOTE experience, students are well prepared to continue at a level which will benefit them both personally and professionally. 7th grade students will rotate quarterly through all four Languages Other Than English.

#### 510. GRADE 7 LATIN

This quarter-long course offers an introduction to the basics of reading and understanding Latin. It covers the beginnings of Latin pronunciation, Latin vocabulary in relation to English word derivatives, the principles of a grammar-based approach to reading comprehension, and Greco-Roman culture and mythology. Students will gain an appreciation of the morphological aspects of translation and a mastery of all the essential building blocks for the successful completion of Latin I and the LOTE Checkpoint A exam the following year.

Grade(s): 7

### 511. LATIN 1

#### 1 Unit

This full-year course introduces the student to the fundamental principles of the language and culture of the



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ancient Romans. In line with current Regents and AP standards, it takes a classical approach to the language, but certain ecclesiastical elements are included. Vocabulary building and word derivatives are stressed, especially regarding pre-professional legal terminology. Students will develop a sense of translation through the study of basic grammar skills as well as gain some further exposure to Roman daily life, history, and mythology. At the completion of this course, students will take the Checkpoint A Exam. All 8th Grade students must pass BOTH the course and the Checkpoint A Exam to receive credit for this course.

Grade(s): 8-12

#### 521. LATIN 2

#### 1 Unit

The student in this course makes practical use of the skills acquired in Latin 1. Cultural background, mythology, and Roman history are further developed, as well as a more advanced and nuanced understanding of grammar-based translation. Students will pursue a more sophisticated development of vocabulary, grammar, and syntax in order to improve their translation skills, in addition to peripheral content. The course work ends in a school examination and directly leads to the successful completion of the Regents examination at the end of Latin 3 and the potential completion of the AP exam.

Grade(s): 9-12

Prerequisites: Successful completion of Latin 1

#### 531. LATIN 3

### 1 Unit

The works of Latin prose and the study of Roman government, history and religion form the core of this course. It continues the study and application of more advanced grammatical structures and places an emphasis on reading comprehension of simple but unabridged classical texts with appropriate historical and literary context. Students will prepare for a thorough Regents-style examination at the end of the year, focusing on all cumulative aspects of previous years. Students must pass both the course and the Checkpoint B final exam with a minimum of 65% to complete the Languages Other Than English requirement for the NYS Advanced Regents Diploma, and higher-level mastery will allow for permission to enroll in AP Latin.

Grade(s): 10-12

Prerequisites: Successful completion of Latin 2

### 551. AP LATIN

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

This college-level course combines an intensive study of two great works of Latin literature: Vergil's Aeneid and Caesar's Gallic Wars. Students will read extensive selections from both works in English to supplement the core focus on translating both authors. Students will also study the rhetorical techniques and literary techniques used by each author. The course covers seven themes: literary genre and style, Roman values, war and empire, leadership, views of non-Romans, history and memory, human beings, and the gods. Students will learn to read and analyze Latin literary texts as windows on the history of the Roman Empire. Summer review assignments are mandatory. This course prepares students to take the AP Exam in Latin and complete a final project.

Grade(s): 11, 12

Prerequisites: Successful completion of Latin 3 and teacher recommendation



## LANGUAGES OTHER THAN ENGLISH

#### 507. GRADE 7 SPANISH

Grade 7 Spanish is an quarter-long introductory course to the language. This course is aligned with Checkpoint A of the Regents Languages Other Than English curriculum from the New York State. The main focus of this course is to introduce new students into the basics of Hispanic culture and basics of the Spanish language in order to develop rudimentary skills in the language. Students will become familiar with the beginning levels of grammar and vocabulary from Checkpoint A from the NYS mandate, which will allow students to communicate in a at a very basic level in Spanish, both in a written and oral form.

Grade(s): 7

## 514. SPANISH 1

### 1 Unit

Spanish 1 integrates all the language skills, including speaking, reading, writing and listening to achieve basic proficiency in the Spanish Language. The curriculum for this course follows the New York State Regents mandate for Checkpoint A of the Languages Other Than English curriculum. This course introduces the student to the basics of the Spanish language and culture. The primary goal of this course is communication at a proficient level in Spanish. Students will study the most elementary concepts of grammar, reading, speaking, listening, and culture, focusing on activities and routines used in daily life at school and home. Students will also develop and enhance cross-cultural skills and understanding of the Hispanic culture, particularly through geography, history, music, art and food. At the completion of this course, students will take the Checkpoint A Exam. All 8th Grade students must pass BOTH the course and the Checkpoint A Exam to receive credit for this course.

## Grade(s): 8-12

#### **524. SPANISH 2**

#### 1 Unit

This course is the second year of the New York State three-year sequence. While the vocabulary topic areas are reintroduced with greater detail, the major focus of this level is grammar. Key concepts include the simple and imperfect past tenses and the use of pronouns. The primary goal is communication and thus students will be expected to constantly practice their speaking, listening comprehension, reading and writing with realistic use of the language. This course will expand students' exploration of cultural differences through learning about traditions, music, geography and food. The final examination is a school examination.

### Grade(s): 9-12

Prerequisites: Successful completion of Spanish 1

#### 534. SPANISH 3R

#### 1 Unit

This is the third and final year required for a three-unit sequence in Languages Other Than English. Students are expected to demonstrate mastery of expanded vocabulary topics. They are expected to be able to express themselves orally with an intermediate degree of fluency in the Regents topic areas. The course will focus on oral expression, listening comprehension, reading comprehension and written expression as well the strengthening of grammar structures to support language development. In order to build fluency, this course will be taught primarily in Spanish with English used for some explanation or clarification. Students will be exposed to genuine target language materials so as to enhance their reading and listening comprehension and appreciation of the culture and customs of the target language. At the completion of this course, students will take a Checkpoint B exam. Students must pass both the course and the exam with a minimum of 65% to complete the Languages



## LANGUAGES OTHER THAN ENGLISH

Other Than English requirement for the NYS Advanced Regents Diploma.

Grade(s): 10-12

Prerequisites: Successful completion of BOTH level 2 course work and the level 2 final examination with

at least 65%

#### 544. SPANISH 4H

#### 1 Unit

Spanish 4H is a dual-enrollment, college-credit course. It is the equivalent of a college sophomore level course and is an advanced grammar and conversation course for serious and highly motivated students. Although some grammar from Spanish 3 will be reviewed, the focus will be given to extending students' knowledge into advanced grammar topics and building communicative fluency. The class will be conducted entirely in Spanish and social topics will be investigated and discussed as well as some Spanish and Latin American literature. This course will increase students' abilities to speak, read, write, and understand the spoken and written target language for both professional and academic purposes. Students are expected to study grammar and vocabulary regularly. In addition, history, geography, art, culture, customs and traditions are explored through literature, videos, and music. This is a Fast Forward course through SUNY Broome (SPA 201).

Grade(s): 11, 12

Prerequisites: Successful completion of Spanish 3R with a course grade of at least 85, a score of 85 or higher on the Checkpoint B Exam, and teacher recommendation

### 545. SPANISH 5H (tentative for 2019-20)

### 1 Unit

Spanish 5H is a dual-enrollment, college-credit course. It is the equivalent of a college sophomore level course and is an advanced grammar and conversation course for serious and highly motivated students. The focus will be given to extending students' knowledge into advanced grammar topics and building communicative fluency. The class will be conducted entirely in Spanish and social topics will be investigated and discussed as well as some Spanish and Latin American literature. Students are expected to study grammar and vocabulary regularly. In addition, history, geography, art, culture, customs and traditions are explored through literature, videos, and music. This is a Fast Forward course through SUNY Broome (SPA 202).

Grade(s): 12

Prerequisites: Successful completion of Spanish 4H

### 512. GRADE 7 AMERICAN SIGN LANGUAGE

Grade 7 American Sign Language is a quarter long course that introduces the curriculum for the high school course American Sign Language 1. It is aligned with the New York State mandate for Checkpoint A of the Regents Languages Other Than English curriculum. This course presents the basics of American Sign Language and Deaf culture to the students. During this course, students will begin to be able to carry on simple voice-off conversations and will learn about Deaf culture, Deaf community and Deaf history.

Grade(s): 7

#### 515. AMERICAN SIGN LANGUAGE 1

#### 1 Unit

American Sign Language is a language used by Deaf people and the Deaf community in America, Canada as well as other countries. It is a language composed of hand shapes, movements, facial expressions, eye contact and overall body language. In our ASL course we will be discussing the Deaf culture and Deaf history, as well as learning to



## LANGUAGES OTHER THAN ENGLISH

communicate using sign language. The main content of signing includes introductions, exchanging personal information, telling about your surroundings, where you live, your family, and activities in which you participate. Upon completion of this course, students will be able to carry on substantial voice-off conversations. 8th Grade students must pass both the course and the Checkpoint A exam to receive credit for this course.

Grade(s): 8-12

### 525. AMERICAN SIGN LANGUAGE 2

#### 1 Unit

American Sign Language 2 is a continuation of ASL 1 but more in depth. Where ASL 1 was more voice on, ASL 2 will have more voice off and signing project opportunities. Main topics in which will be covered include school, sports, activities, daily routines and describing people and things. ASL 2 will focus not only on vocabulary acquisition but fluency as well. Students will continue to gain knowledge and understanding of Deaf culture, Deaf community and Deaf history.

Grade(s): 9-12

Prerequisite: Successful completion of American Sign Language 1

#### 535. AMERICAN SIGN LANGUAGE 3

### 1 Unit

This course will be a continuation of ASL 2 but more in depth. The majority of this course will be voice off. Topics that will be discussed include: home and community, making plans, interpreting, reading various signing styles and types, flow and fluency. Students will increase their understanding of Deaf culture, history, and Deaf education. Students will gain an understanding of interpreter ethics as well as basic interpreting skills. At the completion of this course, students will take the NYS Regents Exam. Students must pass both the course and the exam with a minimum of 65% to complete the Languages Other Than English requirement for the NYS Advanced Regents Diploma.

Grade(s): 10-12

Prerequisite: Successful completion of American Sign Language 2

### 566. GRADE 7 MANDARIN CHINESE

Grade 7 Mandarin Chinese is a quarter long course that introduces the curriculum for the high school course Mandarin Chinese 1. Students will be introduced to beginning levels of grammar and vocabulary from Checkpoint A which will enable students to communicate at the most basic level of the target language in written and oral expression. Students will apply the beginning levels of grammar and vocabulary to develop basic listening, writing, speaking, and reading comprehension skills in the target language. Students also will acquire cross-cultural skills and understanding through the study of geography, history, traditions, culture, art, music, and food. This course is aligned with the New York State mandate for Checkpoint A of the Regents Languages Other Than English curriculum. This course presents the basics of the Mandarin Chinese language and culture to the students.

Grade(s): 7

#### 565. MANDARIN CHINESE 1

#### 1 Unit

The curriculum for Mandarin Chinese 1 follows the New York State Regents mandate for Checkpoint A of the Languages Other Than English curriculum. This course introduces the student to the basics of Mandarin Chinese and culture. This course will enable the students to communicate via written and oral expression at a basic level of the language and to further develop basic listening and reading comprehension of the target language. Students will



## LANGUAGES OTHER THAN ENGLISH

develop cross-cultural skills and understanding, particularly through geography, dance, music, and food. At the completion of this course, students will take a Checkpoint A exam. 8th Grade students must pass both the course and the Checkpoint A exam to receive credit for this course.

Grade(s): 8-12 Prerequisite: None

### 567. MANDARIN CHINESE 2

#### 1 Unit

This course will be a continuation of Mandarin Chinese 1 but more in depth. Students will discuss some deep topics, including Chinese philosophy, ancient Chinese Poetry and literature, opera, and so forth. Students will be capable of talking more fluently in a more native way. This course aims to deepen the students' cross-cultural skills, help them gain a better understanding of Chinese culture, and teach students to analyze the similarities and differences between different cultures. This course will enable students to express in oral and written Mandarin more fluently.

Grade(s): 9-12

Prerequisite: Successful completion of Mandarin Chinese 1

#### 568. MANDARIN CHINESE 3

#### 1 Unit

This course will be a continuation of Mandarin Chinese 2 but more in depth. Students are expected to demonstrate mastery of expanded vocabulary topics. They are expected to be able to express themselves orally with an intermediate degree of fluency in the Regents topic areas. The course will focus on oral expression, listening comprehension, reading comprehension and written expression as well the strengthening of grammar structures to support language development. In order to build fluency, this course will be taught primarily in Mandarin with English used for some explanation or clarification. This course will expose students to genuine target language materials so as to enhance their reading and listening comprehension and appreciation of the culture and customs of the target language. At the completion of this course, students will take a Checkpoint B examination. Students must pass both the course and the exam with a minimum of 65% to complete the Languages Other Than English requirement for the NYS Advanced Regents Diploma.

Grade(s): 10-12

Prerequisite: Successful completion of Mandarin Chinese 2



## **COMPUTER SCIENCE**

The Computer Science Department is designed to educate the student in the field of computers, their history and uses, the availability of software, programming techniques, and the basic concepts of the major programming languages.

#### 607. GRADE 7 COMPUTER SCIENCE

This course is designed to educate students in the safe and educational use of technology. Topics include digital literacy, file management, keyboarding, Google Suite, block programming and project management. Students will develop computational thinking, logical reasoning, and problem solving. Students will practice responsible use of technology. The technology sequence serves as an introduction to computer science and will prepare students who wish to continue with the computer science and engineering courses available at the high school level.

Grade(s): 7

#### 608. GRADE 8 COMPUTER SCIENCE

This course is designed to introduce the students to the Project Lead The Way (PLTW) program and Engineering through the course Automation & Robotics. Topics include types and aspects of engineering, steps engineers take from creation to production of products, problem solving through the Design Process, discovering what automation is, mechanical systems and automated systems. Students will develop teamwork and presentation skills, enhance problem-solving skills by creating solutions to everyday problems, and begin to understand how to build machines and programs using RobotC.

Grade(s): 8

### 622. COMPUTER PROGRAMMING 1

#### 1 Unit

This course is an introduction to the theory and practice of computer programming. Students will learn the fundamental concepts and terminology of software application development and develop skills in designing and writing simple computer programs. Topics will include, but are not limited to, computational thinking, flowcharts, algorithms and pseudocode, variables, operators, conditional and looping statements, and exposure to multiple programming languages with a focus on block based programming. Students will gain a basic understanding of introductory computer science topics such as number systems, recursive functions, and Boolean algebra. This course will require students to create simple algorithms which manipulate data, make calculations, and perform simple operations using loops and functions.

This course may fulfill a Mathematics Credit or an Elective Credit.

Grade(s): 9-12

## 623. AP COMPUTER SCIENCE A (offered every other year, offered in 2019-20)

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. This course will teach students how to write logically structured, well-documented computer programs. This course prepares students for the AP Exam in Computer Science A in May.



## **COMPUTER SCIENCE**

This course may fulfill a Mathematics Credit or an Elective Credit.

Grade(s): 10-12

Prerequisites: 90 or above in Computer Programming 1, Principles of Engineering, or AP Computer

Science Principles and teacher recommendation.

#### 624. COMPUTER PROGRAMMING 2

#### 1 Unit

This course is an exploration of the Python programming language for students with previous programming experience. Python is a versatile programming language, suitable for projects ranging from small scripts to large systems. Topics will include data types, variables, constants, conditionals, loops, and functions in the Python programming language. This course includes hands-on exercises to help you understand the components of Python programming while incrementally developing more significant programs.

Grade(s): 9-12

Prerequisite: This course is not intended for absolute beginners in programming. Students should have prior programming experience in any language. Experience with Python is not required.

## PROJECT LEAD THE WAY

The Project Lead the Way Pathway to Engineering (PTE) program is a sequence of courses which follows a proven hands-on, real-world problem-solving approach to learning. Throughout PTE, students learn and apply the design process, acquire strong teamwork and communication proficiency and develop organizational, critical-thinking, and problem-solving skills. They discover the answers to questions like, How are things made? and What processes go into creating products? Students use the same industry-leading 3D design software used by companies like Intel, Lockheed Martin and Pixar. They explore aerodynamics, astronautics and space life sciences. Students apply biological and engineering concepts related to biomechanics- think robotics. They design, test and actually construct circuits and devices such as smart phones and tablets and work collaboratively on a culminating capstone project. It is STEM education and it is at the heart of today's high-tech, high-skill global economy.

Please note: Many classes are offered on a rotating basis each year. Not every class is offered every year.

#### 645. DESIGN & DRAWING FOR PRODUCTION

### 1 Unit

In this course, students use 3D solid modeling design software to help them design solutions to solve proposed problems. This course is designed for 9th or 10th grade students. The major focus of this course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Throughout this course, students will demonstrate the ability to use 3D solid modeling design software to design solutions to proposed problems. Students will be able to communicate solutions to peers and members of the professional community. This course will prepare students for the PLTW end of course assessment. Success on this assessment will determine if students qualify for college credit through RIT. This course receives a weighting of 1.10. This course meets the NYSED Art/Music graduation requirement.

Grade(s): 9-12

Prerequisite: 85 or above in Algebra 1 or teacher recommendation

646. PRINCIPLES OF ENGINEERING (offered on a rotating basis, not offered in 2019-20)



## PROJECT LEAD THE WAY

#### 1 Unit

This survey course of engineering exposes students to some of the major concepts they'll encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems and will demonstrate ability to document their work and communicate their solutions to peers and members of the professional community. This course is designed for 10th or 11th grade students. This course will prepare students for the PLTW end of course assessment. Success on this assessment will determine if students qualify for college credit through RIT. This course receives a weighting of 1.15. This course may fulfill a Science Credit or an Elective Credit.

Grade(s): 10-12

Prerequisites: Successful completion of Design & Drawing for Production and teacher recommendation. Completion of Rapid Prototyping is strongly recommended prior to this course.

# 648. CIVIL ENGINEERING & ARCHITECTURE (offered on a rotating basis; not offered in 2019-20) 1 Unit

The major focus of this course is completing long-term projects that involve the development of property sites. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of a property. The course provides teachers and students freedom to develop the property as a simulation or for students to model the experiences that civil engineers and architects face. Students work in teams, exploring hands-on civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems and communicating their solutions to their peers and members of the professional community of civil engineering and architecture. This course is designed for 11th or 12th grade students and will prepare students for the PLTW end of course assessment. Success on this assessment will determine if students qualify for college credit through RIT. This course receives a weighting of 1.15. This course may fulfill a Science Credit or an Elective Credit.

Grade(s): 11-12

Prerequisites: Successful completion of Design & Drawing for Production and teacher recommendation

# 649. DIGITAL ELECTRONICS (offered on a rotating basis, not offered 2019-20) 1 Unit

From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices. Students will gain an understanding of the foundations in electronics through the exploration of fundamental components, concepts, and equipment associated with circuit design. Topics will include, but are not limited to, Foundations of Electronics, Combinational Logic, Sequential Logic, Controlling Real World Systems. Using the systematic approaches of AND, OR, Inverter (AOI) combinational logic, students will apply AOI simplification and logic analysis to take design specifications and translate them into the most efficient circuit possible. Students will gain an understanding of sequential logic through the application of the D and J/K flip-flops for asynchronous counters, synchronous counters, and state machines. This course will prepare students for the PLTW end of course assessment. Success on this assessment will determine if students qualify for college credit through RIT. *This course receives a weighting of 1.15*. *This course may fulfill a Mathematics Credit or an Elective Credit.* 

Grade(s): 10-12

Prerequisites: Successful completion of Design & Drawing for Production and teacher recommendation 644. AP COMPUTER SCIENCE PRINCIPLES (offered every other year, not offered 2019-20)



## PROJECT LEAD THE WAY

#### 1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

Open doors in any career with computer science! In Computer Science and Software Engineering, students create apps for mobile devices, automate tasks in a variety of languages, and find patterns in data. Students collaborate to create and present solutions that can improve people's lives, and weigh the ethical and societal issues of how computing and connectivity are changing the world. Projects and problems include app development, visualization of data, cybersecurity, and simulation. Students will develop computational thinking by incorporating multiple platforms and languages. This course will prepare students to take the AP Exam in Computer Science Principles in May. This course may fulfill a Mathematics Credit or an Elective Credit.

**Grades: 10-12** 

Prerequisites: Successful completion of Introduction to Programming, Principles of Engineering, or Digital Electronics and teacher recommendation.

# 647. ENGINEERS OF TOMORROW (offered on a rotating basis, offered 2019-20) 1 Unit

This is a capstone course for the high school engineering program. It is an engineering research course in which students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students will perform research to choose, validate, and justify a technical problem. Students will then design, build, and test their solution. Solutions will then be presented and demonstrated in a professional setting. Students will demonstrate their mastery of engineering and scientific concepts in the solution of engineering design problems. *This course receives a weighting of 1.15*.

Grade(s): 12

Prerequisites: Successful completion of Design & Drawing for Production, Principles of Engineering, one additional engineering course, and teacher recommendation.

# 650. RAPID PROTOTYPING (offered on a rotating basis, offered 2019-20) 1 Unit

This course provides students with an opportunity to conceive, design, and implement a product, using rapid prototyping methods and computer-aided tools. Students will obtain hands-on exposure to processes commonly used to rapidly fabricate prototypes. Focus will be on 3D printing and laser cutting/engraving. Students will learn Autodesk Inventor and Corel Draw for creating prototypes. This is an elective engineering course that is also appropriate for creative art students with strong technical skills. This course concludes with a local exam.

Grade(s): 10-12

Prerequisites: Design and Drawing for Production and teacher recommendation. Students will also be considered with a recommendation from the art department.



## **BUSINESS**

The Business program aims to prepare students to build a knowledge base of business skills and attitudes and apply those skills and attitudes in a constantly changing world in order to be competent, productive, and successful employees and citizens.

# 669. PERSONAL SUCCESS STRATEGIES .25 Unit, 1 Semester

This semester course is designed to enhance the college learning experience and prepare students to be more successful academically, personally and professionally. Students will learn principles and strategies to help them remove personal barriers to success and to implement behavioral changes to be more effective and successful in academic settings. The course focuses as well on developing all the skills needed to reach your potential. Students can receive college credit for this course from SUNY Broome through the Fast Forward Program.

**Grades: 10-12** 

Prerequisites: Teacher or counselor recommendation

## 670. INTRODUCTION TO BUSINESS

1 Unit

In this course students will learn the general background of modern business practices through the study of organization and management, production, human resources, accounting and finance, marketing, and the information needed for control and management decisions in business and society. Possible topics include: Leadership Style, Forms of Business Ownership, Social Responsibility and Ethical Behavior in Business, Workplace Productivity and Motivation, Financial Management, Marketing Basics, Accounting Basics, Human Resources, Technology, Global Business, Internal Structure of Organizations, Effect of economic conditions on business performance, and Advertising.

Grade(s): 9-12 Prerequisites: none

## 671. ACCOUNTING

1 Unit

This course introduces accounting concepts, principles, and procedures; emphasizes the need for financial records; provides the fundamental equation and its application to accounting procedures, including the basic steps of the accounting cycle, special journals and ledgers, work sheets, adjusting and closing entries, special problems in the purchase and sale of merchandise, notes and interest, depreciation, accruals and prepaid items, payroll records, and personal income taxes. Students will develop the skills, knowledge and attitudes necessary for individuals to conduct personal business or to further an education in the field of accounting. Students complete practice sets or simulations and process some data electronically.

Grade(s): 10-12 Prerequisites: none



## CAREER AND TECHNICAL EDUCATION

Career & Technical Education programs provide students with opportunities to gain hands-on work experience. The programs are ideal for students who find it difficult to work in the typical classroom setting. Students interested in these programs should meet with their school counselor. Program deadlines vary and enrollment is limited.

## 665. B.O.C.E.S. JUNIOR LEVEL

### 3 Units

Any student interested in a Career and Technical Education program with the Board of Cooperative Educational Services (BOCES.) should speak directly with his/her school counselor for information and direction. The program is designed for the student interested in courses developed in light of anticipated opportunities for employment or to get a step ahead in a 2 or 4 year college. A student in this program takes required courses at Seton Catholic Central for half the day and career and technical education courses at BOCES during the other half of the school day. Students interested in this program should consult with their school counselor in the Guidance Office.

Grade(s): 11

**Prerequisites: None** 

#### 666. B.O.C.E.S. SENIOR LEVEL

#### 3 Units

Any student interested in a Career and Technical Education program with the Board of Cooperative Educational Services (BOCES.) should speak directly with his/her school counselor for information and direction. The program is designed for the student interested in courses developed in light of anticipated opportunities for employment or to get a step ahead in a 2 or 4 year college. A student in this program takes required courses at Seton Catholic Central for half the day and career and technical education courses at BOCES during the other half of the school day. Students interested in this program should consult with their school counselor in the Guidance Office.

Grade(s): 12

Prerequisites: None

## 660. YOUTH APPRENTICESHIP PROGRAM: JUNIOR LEVEL

#### 2 Units

Youth Apprenticeship is designed to offer high school juniors and seniors the opportunity to see direct connections between academies and employment while working in their occupational field of interest. Students leave their home school for part of the day and work between 10 and 20 hours per week. Paid positions are offered in four career areas: Engineering Technologies, Business/Information Systems, Health Care, and Human and Public Service. Interested students must complete an application package and meet selection criteria. Participating employers interview and hire students. Students receive two credits each year for the work experience, which includes taking two required online courses. Students interested in this program should consult with their school counselor in the Guidance Office.

Grade(s): 11

Prerequisites: None. An application process is required.



## **CAREER & TECHNICAL EDUCATION**

### 661. YOUTH APPRENTICESHIP PROGRAM: SENIOR LEVEL

#### 3 Units

Youth Apprenticeship is designed to offer high school juniors and seniors the opportunity to see direct connections between academies and employment while working in their occupational field of interest. Students leave their home school for part of the day and work between 10 and 20 hours per week. Paid positions are offered in four career areas: Engineering Technologies, Business/Information Systems, Health Care, and Human and Public Service. Interested students must complete an application package and meet selection criteria. Participating employers interview and hire students. Students receive two credits each year for the work experience, which includes taking two required online courses, and one credit for successful completion and formal presentation of a senior project. Students interested in this program should consult with their school counselor in the Guidance Office.

Grade(s): 11, 12

Prerequisites: None. An application process is required.

#### 690. NEW VISIONS ACADEMIES

### 4 Units

New Visions is an academically rigorous program for college-bound high school seniors who are interested in a future career in business, education, engineering, health, or law and government. Students in the program spend each morning taking classes and working side-by-side with professionals, observing and participating in real life experiences and internships. Students have the option of taking their Social Studies 12 credit via Syracuse University Project Advance. In addition, all students participate in Honors English 12, which is taught seminar style and focuses on college preparedness. The application process includes an essay and interview. Students who complete this program earn four high school credits. Students interested in this program should consult with their school counselor.

Grade(s): 12

Prerequisite: minimum GPA of a 90%. An application process is required.

## VISUAL ARTS

The SCC Visual Arts Department is designed to enrich the lives of students, to develop in them an awareness of the richness of God's creation, to stimulate and challenge their creative potential, to stress the importance of art in contemporary living and in our cultural heritage, and to respect individual vision and expression.

#### 707. GRADE 7 ART

The art program for grade 7 is a continuation of the building of hand-eye coordination while exploring new art materials. The students will engage in learning new drawing techniques, exploring color with paint and other mediums, and gain a further understanding of how to create three-dimensional objects. All projects will comply with the New York State Learning Standards in Art.

Grade(s): 7

**708. GRADE 8 ART** 



## **VISUAL ARTS**

The art program for grade 8 is a deeper endeavor into the creative process and how our right and left brains connect and can help strengthen all that we do. Students will be allowed to explore even further with art materials of their choosing, while still learning new techniques in drawing, painting and sculpture. Students will develop verbal and non-verbal communication skills through art production. All projects will comply with the New York State Learning Standards in Art.

Grade(s): 8

### 709. STUDIO IN ART

#### 1 Unit

The student is given a variety of studio experiences in which to explore different element of art, i.e., space, light and color, shape, line, and texture. Movements and trends in art history are also studied. This course serves to offer the beginning art student direct contact with the various forms and media of the visual arts. Students will recognize, understand, and compare many types of artwork from different periods, styles, artists, and media.

Grade(s): 9-12 Prerequisites: none

#### 710. DRAWING AND PAINTING

#### 1 Unit

This is primarily a studio course in which the art student concentrates on exploring the techniques of drawing and painting media such as pencil, pen and ink, pastels, watercolors (both opaque and transparent), and acrylics. Problems in composition and color are considered, as well as the development of individual style. Throughout this course, students will explore more sophisticated media and advanced technique. This course aims to develop and strengthen the creative process through problem solving.

Grade(s): 10-12

Prerequisites: Successful completion of Studio in Art

### 711. ADVANCED DRAWING AND PAINTING

#### 1 Unit

In this course, the student will create works of art that explore different kinds of subject matter, topics, themes, and metaphors. The student will work towards a more mature level of drawing and painting skills, building on experiences gained in previous studies and art projects. These experiences will take place in a studio atmosphere where individual style will be emphasized. A variety of art materials, processes, mediums, and techniques will be explored. Students will create a collection of artwork, in a variety of media, based on instructional assignments and individual and collective experiences which explore perceptions, ideas and viewpoints.

Grade(s): 11, 12

Prerequisites: Successful completion of Studio in Art and Drawing and Painting

### 716. DIGITAL PHOTOGRAPHY

#### .50 Unit

In this course students will begin by learning basic digital camera skills such as camera functions, types of cameras, and handling. Students will then advance into professional photography skills of composition, resolution, aperture, and more. After mastering the basics students will put their knowledge into practice through rigorous bi-weekly photo assignments both in the studio and at home. Through these assignments students will tackle a variety of concepts preparing them for real world applications. Students taking this course will have access to studio light equipment and editing software. Students will be required to provide their own cameras prior to beginning this



## VISUAL ARTS

course.

Grade(s): 10-12

Prerequisite: Successful completion of Studio in Art. A Digital camera is required.

#### 717. SCULPTURE

### .50 Unit

This course is designed to challenge students to think spatially, using a wide variety of mediums including plaster, clay, wire, paper mache, and more. Students will be confronted with the concept of "What is Art?" through an exploration of contemporary sculpture and its wide implications for society. Throughout this course we will build up basic skills towards professional sculptor practices, culminating in a final conceptual sculpture.

Grade(s): 10-12

Prerequisites: Successful completion of Studio in Art

#### 720. INTRODUCTION TO CERAMICS

#### 1 Unit

This course introduces students to fundamental methods of forming clay. The basic techniques for handbuilding (pinch pot, slab construction, and coil construction) will be demonstrated. Special emphasis is placed on the development of basic technique for throwing pots on the potter's wheel. Students will learn to finish pieces with various types of glaze and firing techniques. The terminology and definitions of materials and ceramic processes and ceramic art history will be presented. As a result of this course, students will acquire an understanding of the nature of clay, glazes, and ceramic processes and equipment.

**Grades: 10-12** 

Prerequisite: Successful completion of Studio in Art

### 726. AP STUDIO IN ART 1

#### 1 Unit

The course weighting of a 1.15 will ONLY be applied to the GPA of those students who submit a portfolio at the end of AP Studio in Art 2.

This is a two year program that is geared toward making it possible for the highly motivated student to do college level art work. This is a course that focuses on designing a portfolio for the AP Studio General Portfolio exam. During this course, the student will exam the AP portfolio requirements, review the work created thus far, and evaluate its quality. Newly generated artistic pieces will be aimed toward fulfilling the requirements of the portfolio exam. Students will apply aesthetic and expressive aspects of the visual arts, a sense of individuality in their own works, and a respect for uniqueness in self and in others. Course projects are designed to cover the breadth, concentration, and quality portion of the exam. Exploration and process will be emphasized as a means of developing a concentration that represents growth and understanding.

Grade(s): 11

Prerequisites: 94% minimum average in Studio in Art and Drawing and Painting and permission of Department

### 727. AP STUDIO IN ART 2

#### 1 Unit

All students enrolled in this course are expected to submit a portfolio for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who submit a portfolio.

This is a two year program that is geared toward making it possible for the highly motivated student to do college level art work. This is a course that focuses on designing a portfolio for the AP Studio General Portfolio exam.



## **VISUAL ARTS**

During this course, the student will exam the AP portfolio requirements, review the work created thus far, and evaluate its quality. Newly generated artistic pieces will be aimed toward fulfilling the requirements of the portfolio exam. Students will apply aesthetic and expressive aspects of the visual arts, a sense of individuality in their own works, and a respect for uniqueness in self and in others. Course projects are designed to cover the breadth, concentration, and quality portion of the exam. Exploration and process will be emphasized as a means of developing a concentration that represents growth and understanding.

Grade(s): 12

Prerequisites: Successful completion of AP Studio in Art 1 and permission of Department

729. AP ART HISTORY

1 Unit

All students enrolled in this course are expected to sit for the Advanced Placement exam. The course weighting of a 1.15 will ONLY be applied to the GPA of those students who sit for the Advanced Placement exam.

This course teaches students to understand works of art within their historical context by examining issues such as politics, religion, patronage, gender, function, and ethnicity. The course teaches students to understand works of art through both contextual and visual analysis. Students will be able to recognize, understand and compare many types of art work including works from different periods, styles, artists and media. They will engage in analytical and critical thinking, creating comparisons from one artwork to another including comparisons between European and non-European work. This course aims to prepare students to successfully complete the advanced placement exam and leave the course with an appreciation of the history of art through further study and/or museum patronage.

Grade(s): 11, 12

Prerequisites: Department approval. Completion of AP World History is strongly encouraged. A summer assignment is required.

## **PERFORMING ARTS**

The Music Department gives the student an opportunity to deepen his/her understanding of music and to develop personal skills for music performance.

NOTE: All performance-based courses include a concert participation component, without which credit cannot be gained. Any student forced to miss such a concert due to illness may gain credit by: submitting a written excuse from a parent or guardian, AND preparing an 8-10 page report on a musical topic selected by the teacher, OR a musical composition of equal length. The makeup work must be submitted by the end of the marking period during which the concert is missed.

### 747. GRADE 7 MUSIC

Grade 7 music is taught based on the NYS Music Curriculum, including the development of basic music skills, keyboarding skills, and creative activities. Initial training may be remedial to get all students up to NYS levels. Students will create and perform a variety of musical compositions that represent works from people around the world. This course will enhance students' knowledge of traditional, electronic, and nontraditional sound sources to create music. Students will learn to think and speak critically about the aesthetic, structural, acoustic, and psychological qualities of music. Instrumental music courses will also be offered to students who are interested in performance opportunities.

Grade(s): 7



## **PERFORMING ARTS**

#### 748. GRADE 8 MUSIC

Music content in grade 8 continues to develop upon lesson topics from Grade 7 General Music. This course addresses areas in creating and Students will learn how to use a variety of sound sources to create and perform music. Through the music curriculum, students will learn to develop the capacity to listen to and comment on music. Students will be exposed to a variety of musical genres, styles, and cultures while creating and performing a variety of musical compositions that represent works from people around the world.

Grade(s): 8

### 749. MUSIC THEORY

#### 1 Unit

In music theory students will learn basic ear training and piano skills. The largest portion of this class is understanding how to read and write music as well as how western music functions.

Grade(s): 9-12

Prerequisite: At least equivalent basic music knowledge to that taught in Basic Music Skills or approval of the instructor

#### 736. CONCERT CHOIR

#### 1 Unit

This course is designed to give students an opportunity to sing in a 4 part harmony setting. The students will learn how to read music, use solfeggio and apply it to part singing. The students are required to sing 2 concerts a year. A christmas concert and a spring concert. If students cannot make the concerts they will be required to do a 10 page research paper for their grade. This course can be taken every year.

Grade(s): 9-12

Prerequisite(s): None

#### 737. THEATER ARTS

#### 1 Unit

This class is designed to give the student an experience of several aspects of theater. The student will be taught the basics of acting, voice production and basic body awareness. All this will be done through a hands on approach. The method used is the Viola Spolin and Meisner methodology of acting and awareness. The student will also be taught basic circus skills, such as juggling and balance. The student will also be taught audition skills so that they can go out into the community or college auditions prepared. Finally, the student will be given a brief overview of the history of theater. Students will be assessed on Acting/Audition skills, Juggling/Balance, Scene work, and Theater history.

Grade(s): 9-12

Prerequisites: None

#### **752. BAND**

#### 1 Unit

This course is a band class for beginner students, designed to increase music skills. There is also a study of various types of music and historical materials for many types of band music. An instrument is required in most cases. This course is recommended for ninth graders. Students will participate in at least two concerts.

Grade(s): 9-12

Prerequisite: Concurrent enrollment in Sectionals (753, 754, 755)



## **PERFOMING ARTS**

#### 765. CHAMBER GROUP

### .25 Unit

This course is a small ensemble group formed to explore types of music requiring more serious study. This course for the intermediate or advanced student will concentrate on the classics. This course will expose students to a variety of composers and styles of music. Students will participate in at least two concerts.

Grade(s): 9-12

Prerequisites: By audition only

#### 768. INSTRUMENTAL BEGINNER

#### .25 Unit

This course covers all types of styles and techniques of the student's chosen instrument, including music reading, transposing, improvising, and many other topics. Students will develop skills in basic note reading, master basic chords, and experience group playing in a liturgy or a concert.

Grade(s): 9-12

Prerequisites: None

#### 767. ADVANCED GUITAR

#### .25 Unit

This course is a further development of skills covered in Guitar 1. Students will further develop reading of notes and chords, master basic theory, and learn all types of material from Folk Mass to Classical.

Grade(s): 9-12

Prerequisite: Teacher recommendation

### 771. STAGE BAND

#### 1 Unit

This course is a large ensemble exploring music of "Big Band", Modern Jazz, Pop, and Jazz-Rock. An instrument is required in most cases. Performance is required. Students will demonstrate mastery of normal signs used in band material, use all key signatures and note values and be able to sight-read up to sixteenth notes, and participate in at least two shows or concerts.

Grade(s): 9-12

Prerequisites: By audition only; limited to 30 participants. Concurrent enrollment in Sectionals (772, 773, 774)

### 753, 754, 755, 772, 773, 774. SECTIONALS

.25 Unit

Band: 753: Brass, 754: Rhythm, 755: Woodwinds

Stage Band: 772: Brass, 773: Rhythm, 774: Woodwinds

This is a course for more in-depth study of individual sections of band material. Stage Band and Band members must enroll in one of these sessions. This course will reinforce band curriculum and improvising, using a more personal approach.

Brass: French horn, cornet, trumpet, trombone

Rhythm: Guitar, piano, keyboard, percussion, strings

Woodwinds: Flute, clarinet, oboe, saxophone

Grade(s): 9-12

Prerequisite: Band and Stage Band and students are required to sign up for the appropriate sectional The Physical Education Department's emphasis is on lifelong physical activity based on a sequential,



## PHYSICAL EDUCATION

kinesthetic approach. Students will be competent in six areas and proficient in all three areas of physical education upon graduation. SCC adheres to the NYS Department of Education standards in physical education: (1) personal health and fitness (2) a safe and healthy environment, and (3) resource management. These standards will lead students to become lifelong activity learners.

### 807/808. GRADES 7 & 8 PHYSICAL EDUCATION

The goal of the Physical Education Program is to guide students in the development and maintenance of fitness levels, acquisition and refinement of sport skills, social skills and sportsmanship and working knowledge of rules and strategies used in game play. This course promotes lifelong learning in the area of health and fitness. Units will include a wide variety of individual and team activities such as; soccer, football, basketball, golf, volleyball, tennis, badminton, baseball, frisbee, bowling, and fitness. Learning and becoming proficient in the skills that make up these activities is fundamental to the individual's growth and development in each area of sport and activity.

Grade(s): 7-8

## 803/804/811/812/813/814. 9-12 PHYSICAL EDUCATION

### .5 Unit

The high school (9th - 12th) Physical Education program is geared toward an understanding of both individual and team sports concepts and skill development. The Physical Education program also teaches and promotes lifelong skills and activities for a healthy lifestyle as well as reinforcing Christian values through physical activity, cooperative play, and personal responsibilities. The program emphasizes attendance, teamwork and active participation.

Grade(s): 9-12.

## TYPICAL COURSES BY GRADE

Grade 7:

Theology

**English Language Arts** 

Social Studies

Mathematics/Advanced Mathematics

Science/Advanced Science

LOTE Art Music

Health

Computer Science Physical Education Grade 8:

Theology

**English Language Arts** 

**Social Studies** 

Mathematics/Algebra 1

Science/Regents Earth Science

LOTE Art Music Health

Computer Science Physical Education

Grade 9:

Theology 9 English 9

Global History 1 Mathematics

Science LOTE Art/Music

Physical Education
1 Credit of Electives

Grade 10:

Theology 10

English 10 or 10H

Social Studies

Mathematics

Science

Physical Education 2 Credits of Electives Grade 11:

Theology

English

Social Studies Mathematics

Science

Physical Education 2 Credits of Electives

Grade 12:

Theology English Health Economics

Participation in Government

Mathematics Science

Physical Education 1.5 Credits of Electives



70 Seminary Avenue Binghamton, NY 13905 607-723-5307

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