

CHOICES HANDBOOK

*A Planning Guide
for Diploma Requirements*

2021-2022



Counseling & Career Center

Phone: (315) 484-1401

Visit us on the web @ www.solvayschools.org

Counseling & Career Center Staff

Mr. Guercio – Director of Guidance

Mrs. DeWaters – School Counselor

Mrs. Passalugo-Wales – School Counselor

“Experience the Pride”

January 2021

Dear Students,

Welcome to the 2021-2022 edition of the Choices Handbook. We look forward to working with you as you make important decisions regarding your high school years. This handbook is designed to provide accurate information regarding course descriptions. It is also intended to acquaint you with the most recent diploma requirements mandated by both the Solvay School District as well as the New York State Department of Education. Please carefully examine the requirements that are detailed within to become familiar with the courses and examinations that you will need to complete in order to graduate from Solvay High School.

While courses in the freshman and sophomore years are fairly well prescribed, there is greater flexibility as you progress to the upper grade levels. The most effective means of gaining that choice is through academic focus and successful completion of required classes and Regents examinations. Freshmen should discuss the Foreign Language and Fine Arts requirements as well as Career and Technical Education opportunities with their counselor in order to understand the widest and most appropriate range of options available.

Once you have made your schedule choices, every effort will be made to preserve your requests. However, constraints within the master schedule may make that impossible. Should it be necessary to adjust your selections, we will suggest alternative classes that may be similar in nature to the one in conflict. As early planning can often prevent later disappointment, final course requests need to be completed in a timely manner. Schedule change requests made over the summer are difficult to accommodate and those made after school has opened are virtually impossible.

Throughout your high school years, you will be making many important and often life changing decisions. Included are those involving the contemplation of career opportunities, college, technical and trade school options, the establishment of goals and the management of personal challenges. The decisions and choices that you make today may heavily impact upon the options that you will have available in the future. Choose wisely and make all that you do, be a positive reflection on who you are. The counselors look forward to helping you through the years and welcome all questions and concerns that you may have.

Good luck for a very successful and greatly rewarding high school experience!

Solvay High School Counselors,

William Guercio, Director of Guidance
Kristine DeWaters, Counselor
Michele Passalugo-Wales, Counselor

Students with Last Names A – E
Students with Last Names N – Z
Students with Last Names F – M

STUDENT RCT/REGENTS REQUIREMENTS

Regents Diploma		Advanced Designation Diploma	
English	4	English	4
Social Studies	4	Social Studies	4
Math ²	3	Math	3
Science ²	3	Science	3
Foreign Language ¹	1	Foreign Language ³	3
Art/Music	1	Art/Music	1
Health	.5	Health	.5
Physical Education	2	Physical Education	2
Electives	3.5	Electives	1.5
Total	22.0	Total	22.0

<i>Required Exams</i> (Passing score of 65 and above)	<i>Required Exams</i> (Passing score of 65 and above)
Common Core English	Common Core English
Common Core Algebra	Common Core Algebra, Geometry & Algebra 2/Trigonometry
Regents Global Studies	Regents Global Studies Exam
Regents U.S. History	Regents U.S. History Exam
Regents Science	Two Regents Science Exams

¹Students are required to have successfully completed one unit of credit in a foreign language by the end of their freshman year and pass a final exam.

²An integrated course in mathematics/science/technology may be used as the third required unit of credit in mathematics or science.

³ Students acquiring 5 units of credit in Art, Business, Technology or Vocational Education may be exempt.

Solvay High School

Course Selection Sheet

2021-2022

Name: _____
 Grade: _____ ID: _____
 Phone: _____

Course#	English Courses	Credit
0002	English 9	1.00
0003	English 9 H	1.00
0010	English 10	1.00
0011	English 10 H	1.00
0018	English 11	1.00
0019	English 11 H	1.00
0028	English 12	1.00
0031	OCC Learning Seminars (ILS153)	0.50
0037	OCC English (ENG 103)	0.50
0038	OCC English (ENG104)	0.50
0901	English AIS	
Course#	ESL Courses	Credit
0174	ENL 9-10	1.00
0175	ENL 11-12	1.00
0176	Integrated ENL 9-10	1.00
0177	Integrated ENL 11-12	1.00
Course#	Foreign Language Courses	Credit
0162	Spanish 1	1.00
0164	Spanish 2	1.00
0168	Spanish 3	1.00
0173	CCC Spanish 4 (SPA103)	1.00
0178	CCC Spanish 5 (SPA104)	1.00
0186	Italian 2	1.00
0188	Italian 3	1.00
0190	CCC Italian 4	1.00
0191	CCC Italian 5	1.00
Course#	Musical Courses	Credit
0600	Concert Chorus	1.00
0602	Vocal Jazz Ensemble	1.00
0604	Concert Band	1.00
0608	Jazz Band 9-11	1.00
0610	OCC Jazz Band (MUS151V)	1.00
0611	OCC Jazz Band (MUS152J)	1.00
0619	OCC Music Appreciation (MUS103/104)	1.00

Course#	Mathematics Courses	Credit
0140	Fundamentals of Algebra	1.00
0126	Algebra I	1.00
0127	Geometry	1.00
0154	Algebra II w/Trigonometry	1.00
0156	PreCalculus w/Trig	1.00
0158	CCC Algebra II/Trig H (MAT104)	1.00
0150	OCC PreCalc/Trig (MAT143)	1.00
	College Calculus	1.00
0146	Statistics	1.00
0151	Robotics Engineering	1.00
0225	Business & Personal Finance	1.00
0226	OCC Finite Math (BUS102)	1.00
0903	Math AIS	
Course#	Business Courses	Credit
0201	Career & Financial Mgt.	0.50
0208	Business Ownership	0.50
0225	Business & Personal Finance	1.00
0226	OCC Finite Math (BUS102)	1.00
0228	OCC Financial Acc (BUS105)	1.00
0233	Business Law	0.50
0236	Co-Op	
0238	Sports & Ent Marketing	0.50
0240	OCC Desktop Pub (ART123)	1.00
0241	Intro to Business - DECA	0.50
Course#	Art Courses	Credit
0400	Studio in Art	1.00
0406	Drawing & Painting	1.00
0411	Senior Studio	1.00
0412	Ceramics	1.00
0415	Advanced Ceramics	1.00
0421	Observational Drawing	1.00
Course#	Family Consumer Science Courses	Credit
0302	Clothing & Textiles	0.50
0303	Food & Nutrition	0.50
0305	Culture & Foods	0.50
0308	Housing & Environment	0.50
0310	Child Psychology	0.50

Course#	Science Courses	Credit
0084	Physical Setting/Earth Science	1.00
0086	Physical Setting/Earth Science H	1.00
0096	Living Environment/Biology	1.00
0099	Everyday Physics I	0.50
0101	Everyday Physics II	0.50
0103	General Chemistry I	0.50
0104	General Chemistry II	0.50
0105	ESF General Bio I (EFB101)	0.50
0109	ESF General Bio II (EFB103)	0.50
0106	Physical Setting/Chemistry	1.00
0107	Chemistry Honors (PSE296)	1.00
0118	ESF Global Environment (EFB120)	1.00
0135	AP Physics I	1.00
0136	Physical Science I	0.50
0137	Physical Science II	0.50
0138	Applied Science: Forensics	0.50
0315	Applied Food Science I	0.50
0316	Applied Food Science II	0.50
0913	Science AIS	
Course#	Social Studies Courses	Credit
0040	Global History/Geo 9	1.00
0041	Global History/Geo 9 H	1.00
0048	Global History/Geo 10	1.00
0050	Global History/Geo 10 H	1.00
0056	U.S. History/Gov	1.00
0065	OCC American History (HIS106/107)	0.50
0067	Economics	0.50
0069	Government	0.50
0072	SUPA Sociology (SOC101)	0.50
0074	SUPA Psychology (PSY205)	0.50
0902	Social Studies AIS	
Course#	Physical Education Courses	Credit
0657	Health	0.50
0658	Adaptive Physical Education	0.50
0659	Physical Education	0.50
0662	Better Life-Better You	0.50

Course#	Technology Courses	Credit
0509	Web Design	0.50
0510	Electricity/Electronics	0.50
0514	Residential Structures	0.50
0517	Computer Graphics I	0.50
0519	Computer Graphics II	0.50
0524	Materials Processing	0.50
0528	Architectural Drawing	0.50
0531	Coding: Games & Apps	0.50
0532	OCC Design & Draw (MET161)	1.00
0540	Video Production	0.50
0541	Computer Science	0.50
0542	Manufacturing Systems	0.50
0545	Black & White Photography	0.50
0546	Digital Imaging	0.50
0547	OCC Principles of Eng. (MET150)	1.00
0548	Computer Integrated Manufacturing	0.50
0549	The Internet of Things	0.50
0550	Robotics Design and Innovation	0.50
0551	General Carpentry	0.50
0552	Small Engine Mechanics	0.50
0553	Automotive Technology	0.50
0554	Creativity & Innovation	0.50
0555	Computer Animation	0.50
0556	Advanced Game Programming	0.50
0557	Alternative Process	0.50
0558	Transportation Systems	0.50
0559	Digital Photography	0.50
Course#	Additional Courses	Credit
0119	Life Skills	
0660	Resource	

To Parents or Guardians:
 Should you have any questions or concerns, contact your child's counselor for help or clarification at 484-1401. This form must be signed and returned to the Counseling & Career Center.

Counselor Signature _____ Date _____

Parent Signature _____ Date _____

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ART

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0401 Mixed Media Studio I
0402 Mixed Media Studio II
0406 Drawing & Painting
0407 Advanced Drawing & Painting
0411 Senior Studio

0412 Introduction to Ceramics
0415 Advanced Ceramics
0417 Studio in Photography
0420 Sculpture
0421 Observational Drawing

0400 Studio in Art

Credit: 1 Unit

Prerequisite: None

40 Weeks

Studio in Art is a foundation course for students in grades 9-12 who need to complete one credit of fine arts for graduation requirements, or is the introductory course for those students planning a three-year or five-year art sequence. The course is an overview of the art world, incorporating two- and three-dimensional work with art history and art criticism. Students will draw from life studies, paint, and use three-dimensional mediums such as clay, wire and mixed media.

0401 Mixed Media Studio I: Glass Arts

Credit: ½ Unit

Prerequisite: Studio in Art

20 Weeks

This ½ year course will be an exploratory course focusing on arts in the field of glass. Students will learn stained-glass crafting methods, as well as the process of how to slump glass and learn the art of enameling. Students will be expected to participate in group critiques, as well as provide written reflections on work and the processes we will be using in the classroom.

0402 Mixed Media Studio II: Textiles and Printmaking

Credit: ½ Unit

Prerequisite: Studio in Art

20 Weeks

This ½ year course will focus on fiber applications in the classroom, including, but not limited to learning about history of paper-making and the processes, using a dye lab to create surface pattern design on fabric, batik, and silk painting. The course will also include a unit on print-making. Students will be expected to participate in group critiques, and do exploratory studies outside of the classroom involving the processes we will be utilizing in the classroom.

0406 Drawing & Painting

Credit: 1 Unit

Prerequisite: Studio in Art

40 Weeks

Drawing and Painting is a full-year course for students in grades 10-12 who have successfully completed one unit/one year of Studio in Art and wish to acquire a three- or five-year sequence in art. The focus of this course is completely two-dimensional, including such media as pencil, charcoal, pastel, colored pencil, acrylic and watercolor painting. Studies will include figure drawing, observational life studies, art history and a focus on application of the elements and principles of art.

0407 Advanced Drawing & Painting

Credit: 1 Unit

Prerequisite: Drawing & Painting, Teacher
Recommendation

40 Weeks

This is a full year course that is designed to be a continuation of Drawing and Painting for the serious art student. This course will have emphasis on observational drawing from the figure, still life and landscapes. It will also include the study and practice of a variety of 2-D media such as graphite, charcoal, conte crayon, soft pastel, oil pastel, watercolor, acrylic paints and mixed media. This course is designed to help students establish portfolio quality artwork for college entry.

0409 Senior Studio I

Credit: 1 Unit

Prerequisite: 3 Units of Art and Teacher
Approval

40 Weeks

Senior Studio is an advanced art course designed for seniors who have successfully completed at least 3 high school art courses. Students must have an existing collection of work prior to entering this course and must complete a work-review with the instructor prior to signing up. Senior Studio provides an opportunity for seniors that are seriously interested in art to work independently and explore their artistic ideas, 2D and/or 3D, under the guidance of the instructor. Senior Studio I allows student time to *complete* their portfolio for college admissions.

0412 Introduction to Ceramics

Credit: 1 Unit

Prerequisite: Studio in Art

40 Weeks

This is a full-year course in which students will explore the art of working with clay. The foundations of the course are built upon basic hand-building methods and creative exploration using themes, symbolism and cultures as inspiration. Studies will include historical and cultural overview of the art of ceramics. Students will develop "the basics" needed for applications towards more complex ceramic work.

0415 Advanced Ceramics

Credit: 1 Unit

Prerequisite: Studio in Art and Introduction to Ceramics

40 Weeks

This full-year course is designed to give students studio time to develop their ceramic techniques and personal style. Prior skills and techniques will be re-introduced and utilized in more advanced work for this course. The assignments will be broad-based, and open to individual interpretation. The course will include full-use and instruction of the ceramic wheel and serve as an introduction to wheel-throwing abilities based on demand.

0417 Studio in Photography

Credit: ½ Unit

Prerequisite: Studio in Art

20 Weeks

In this half year course students will explore the art of digital photography. The foundations of this course are built upon photo composition, camera usage & techniques, the study of famous photographers and analysis of student work. Studies will include landscape, portrait, self-portrait, motion and altered photography. Students will be introduced to, but limited in, the use of Photoshop.

0420 Sculpture

Credit: 1 Unit

Prerequisite: Studio in Art, Ceramics

40 Weeks

The primary focus of this course is to introduce students to the basic concepts of sculpture, including the visual vocabulary used in creating and critiquing artwork. Students will explore the elements and principles of 3-D art while creating sculptures using various materials and methods (i.e. clay, ceramics, toothpicks, wire, and paper machete.) In this course students will also study the historical and cultural aspects of sculpture.

0421 Observational Drawing

Credit: 1 Unit

Prerequisite: Studio in Art, Drawing & Painting

40 Weeks

Observational Drawing is a course whose focus is on drawing and painting from actual objects, people and places without the use of photographic references. Content will include, but not be limited to:

Application of new tools used to check the accuracy of symmetrical objects and to determine size relationships of objects within a still life.

Figure drawing as well as portraiture (study of facial spacing and proportions).

Study of landscape and inhabitants of local places of interest (such as Stone Quarry Art Park and Rosamond Gifford Zoo.)

BUSINESS

0201 Career & Financial Management
0204 Keyboarding/Information Processing
0208 Business Ownership
0225 Business and Personal Finance
0226 BUS102 OCC Finite Math for Business
0228 BUS105 OCC Financial Accounting

0233 Business Law
0236 Co-Op
0238 Sports & Entertainment Marketing
0240 ART123 OCC Desktop Publishing
0241 Intro to Business - DECA

0201 Career & Financial Management

Credit: ½ Unit

Prerequisite: None

20 Weeks

The focus of this course is to provide practical workplace skills for *every* student. The course will begin with a concentration on career planning, selection and success. Projects will include creating your own resume, job applications, mock interviews and projects. Guest speakers from numerous backgrounds will be presented to introduce different careers. The second half of this course will be devoted to basic financial skills such as money management, credit, tax preparation and identity theft. Projects will include car buying, budget simulations, and creating power point presentations.

0204 Keyboarding/Information Processing

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course is designed to orient students to the basic alphabetic, numeric and symbolic keyboard through the touch typing method. Students will learn how to prepare enumerations, letters, term papers and Power Point presentations using Micro Type Media and Microsoft software.

0208 Business Ownership

Credit: ½ Unit

Prerequisite: None

20 Weeks

Are you interested in owning your own business? Take an Entrepreneurial IQ test to determine if you possess the necessary characteristics to work for yourself! In-class computer projects that will prepare you for opening a business include the following: marketing research surveys, creating and designing business cards, forming a business plan and writing press releases. Fulfill the fun and practical real life application by working at the school store.

0225 Business and Personal Finance

Credit: 1 Unit

Prerequisite: Algebra I

40 Weeks

This class teaches students a practical application of math. Students will learn how to calculate gross/net pay, interest, insurance, taxes, and consumer credit. Basic arithmetic operations, statistics, graphing and algebra are applied to these concepts as well as a range of others. Completion of this class with a passing grade earns the student 1 credit but is part of both a business sequence and a math sequence.

0226 BUS102 OCC Finite Math for Business

Credit: 1 Unit High School, 3 OCC credits

Prerequisite: Algebra I

40 Weeks

Finite Math for Business is a study of mathematical concepts and processes as applied to business and finance. Students will develop skills to perform with accuracy mathematical operations integral to the interpretation and solution of business problems. Arithmetic operations, signed numbers, linear equations, percentage and statistical procedures, are applied to such topics as accounting, retailing, risk management, banking, and finance. Completion of this course with a passing grade earns the student 1 credit but is part of both a business sequence and a math sequence.

0228 BUS105 OCC Financial Accounting

Credit: 1 Unit, 3 OCC Credits

Prerequisite: None

40 Weeks

An introduction to accounting as a means of recording business activities. This course includes a study of the classification and recording of original business transactions, the preparation and evaluation of financial statements, and the application of Generally Accepted Accounting Principles. The course will incorporate appropriate technology to include spreadsheet and presentation software in the instruction process.

0233 Business Law

Credit: 1 Unit

Prerequisite: None

40 Weeks

This course is designed to introduce the student to the basics of our legal system, the application and ethics of civil, consumer and business laws and how they may be applied to everyday life. A trip to the court house or Jamesville Prison is always a possibility. After studying criminal law, police rights and criminal rights, emphasis will be made on the particulars of contracts and on the legal rights of consumers and individuals.

0236 Co-Op

Credit: ½ - 1 Unit

Prerequisite: None

40 Weeks

Do you have a job or plan on getting one? You can earn up to 1 credit per year (2 total) towards graduation for working 150 – 300 hours over the course of the year. All you have to be is enrolled in ANY business course and an instructor will visit your job site. It's that simple. This is not a class that meets once a day, 5 days a week. You fill out your hours, come to one meeting after school once a month.....and that's all there is to it.

0238 Sports & Entertainment Marketing

Credit: ½ Unit

Prerequisite: None

20 Weeks

An exciting course that will take you on a step-by-step journey through the sports and entertainment industry. How did Gatorade become such a "necessity" to athletes; whose product is better – Nike or Under Armor? How does Disneyland get people to spend? How much does it cost to produce a CD? Spiderman the movie cost 300 million to produce and Paranormal Activity 15 thousand? All this and more will be discussed and researched in Sports and Entertainment Marketing.

0240 ART123 OCC Desktop Publishing

Credit: 1 Unit, 3 OCC Credits

Prerequisite: None

40 Weeks

Using Microsoft and Adobe software, this course allows students to use their creativity to produce flyers, cards, brochures, calendars and newsletters using scanners, digital cameras and video. This course is recommended for the college bound student as well as business majors.

0241 Intro to Business - DECA

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course will use DECA competitive events to introduce students to basic business concepts in five business career clusters. These are: Business Management & Administration, Entrepreneurship, Marketing, Finance, Hospitality & Tourism, and Personal Financial Literacy. Students will apply business concepts in hands-on DECA competitive events. In addition to the course, all students will participate in DECA and compete in business events at the winter regional competition. Additionally, students will gain real-life retail business experience by assisting with the management of the school-based enterprise, the Solvay Café.

ENGLISH LANGUAGE ARTS

0002 English 9
0003 English 9 Honors
0010 English 10
0011 English 10 Honors
0018 English 11
0019 English 11 Honors

0028 English 12
0035 WRT114 SUPA Writing Culture
0037/0038 ENG103/104 OCC English
0031 ILS153 OCC Integrated Learning Seminars
0039 Comedy & Humor
0901 English AIS

0002 English 9

Credit: 1 Unit

Prerequisite: English 8

40 Weeks

This course familiarizes students with the literary study of fictional forms such as the novel, short story, poetry, and drama, and with non-fictional forms such as the essay, the article, biography, and autobiography. In this course, as with all English courses, there is a summer reading list that will be a component of the grade for the course.

There are required classroom texts and required outside reading texts. The course not only requires students to read, but it provides instruction in other components of the study of the English language: research techniques, grammar, correct usage, vocabulary development, spelling, punctuation, capitalization, speaking and listening. Students will write narratives, persuasive pieces, analytical responses to literature, and a research assignment. Teachers emphasize student writing using a process approach, which involves multiple drafts, peer editing, and revision.

All aspects of the course are designed to help students to exceed the greater expectations for learning set forth in the New York State Common Core Aligned Standards for English Language Arts, and to provide students with the tools needed to excel on New York State Assessments.

0003 English 9 Honors

Credit: 1 Unit

Prerequisite: Advanced English 8, Teacher
Recommendation, Essay Required

40 Weeks

The course develops students' understanding of fictional forms including the novel, short story, poetry, and drama, and non-fictional forms such as the essay, the article, biography, and autobiography. Students read a variety of required titles. This honors level course requires students to employ higher order literacy and interpretation skills while they read widely, reflect purposefully, and discuss extensively the structure and purpose of works of recognized literary merit.

In this course, as with all English courses, there is a summer reading list with a related project that will be a component of the grade for the course.

There are required classroom texts and required outside reading texts. The course not only requires students to read extensively, but provides instruction in other components of the study of the English language: research techniques, grammar, correct usage, vocabulary development, spelling, punctuation, capitalization, speaking and listening. Students will write narratives, persuasive pieces, analytical responses to literature, and a research assignment. Teachers emphasize student writing using a process approach, which involves multiple drafts, peer editing, and revision.

Rigorous and demanding work, beyond that of the regular English class, is required of the students. All aspects of this course are designed to help students exceed the greater expectations for learning set forth in the New York State Common Core Aligned Standards for English Language Arts, and to provide students with the tools needed to excel on New York State Assessments.

0010 English 10

Credit: 1 Unit

Prerequisite: English 9

40 Weeks

This course continues to familiarize students with the literary study of fictional forms such as the novel, short story, poetry, and drama, and with non-fictional forms such as the essay, the article, biography, and autobiography. Students read a variety of required titles, including but not limited to Twelve Angry Men, Huck Finn, Inherit the Wind, Imitate the Tiger, Gospel According to Larry, The Pearl and Lord of the Flies. Additional paperback readings may be required. In this course, as with all English courses, there is a summer reading list with a related project that will be a component of the grade for the course.

There are required classroom texts and required outside reading texts. The course not only requires students to read, but provides instruction in other components of the study of the English language: research techniques, grammar, correct usage, vocabulary development, spelling, punctuation, capitalization, speaking and listening. Students will write narratives, persuasive pieces, analytical responses to literature, and a research assignment. Teachers emphasize student writing using a process approach, which involves multiple drafts, peer editing, and revision.

All aspects of the course are designed to help students to exceed the greater expectations for learning set forth in the New York State Common core Aligned Standards for English Language Arts, and to provide students with the tools needed to excel on New York State Assessments.

0011 English 10 Honors

Credit: 1 Unit

Prerequisite: English 9 Honors or Teacher Recommendation 40 Weeks

The course develops students' understanding of fictional forms including the novel, short story, poetry, and drama, and non-fictional forms such as the essay, the article, biography, and autobiography. Students read a variety of required titles. This honors level course requires students to employ higher order literacy and interpretation skills while they read widely, reflect purposefully, and discuss extensively the structure and purpose of works of recognized literary merit.

In this course, as with all English courses, there is a summer reading list with a related project that will be a component of the grade for the course.

There are required classroom texts and required outside reading texts. The course not only requires students to read extensively, but provides instruction in other components of the study of the English language: research techniques, grammar, correct usage, vocabulary development, spelling, punctuation, capitalization, speaking and listening. Students will write narratives, persuasive pieces, analytical responses to literature, and a research assignment. Teachers emphasize student writing using a process approach, which involves multiple drafts, peer editing, and revision.

Rigorous and demanding work, beyond that of the regular English class, is required of the students. All aspects of this course are designed to help students exceed the greater expectations for learning set forth in the New York State Common Core Aligned Standards for English Language Arts, and to provide students with the tools needed to excel on New York State Assessments.

0018 English 11

Credit: 1 Unit

Prerequisite: English 10 40 Weeks

This course familiarizes students with the literary study of fictional forms such as the novel, short story, poetry, and drama, and with non-fictional forms such as the essay, the article, biography, and autobiography.

In this course, as with all English courses, there is a summer reading list with a related project that will be a component of the grade for the course.

There are required classroom texts and required outside reading texts. The course not only requires students to read, but provides instruction in other components of the study of the English language: research techniques, grammar, correct usage, vocabulary development, spelling, punctuation, capitalization, speaking and listening. Students will write narratives, persuasive pieces, analytical responses to literature, and a research assignment. Teachers emphasize student writing using a process approach, which involves multiple drafts, peer editing, and revision.

All aspects of the course are designed to help students to exceed the greater expectations for learning set forth in the New York State Common Core Aligned Standards for English Language Arts. Students are required to take the New York State Common Core English Language Arts Regents Assessment given at the end of the junior year.

0019 English 11 Honors

Credit: 1 Unit

Prerequisite: English 10 Honors or Teacher Recommendation 40 Weeks

The course develops students' understanding of fictional forms including the novel, short story, poetry, and drama, and non-fictional forms such as the essay, the article, biography, and autobiography. Students read a variety of required titles. This honors level course requires students to employ higher order literacy and interpretation skills while they read widely, reflect purposefully, and discuss extensively the structure and purpose of works of recognized literary merit.

In this course, as with all English courses, there is a summer reading list with a related project that will be a component of the grade for the course.

There are required classroom texts and required outside reading texts. The course not only requires students to read extensively, but provides instruction in other components of the study of the English language: research techniques, grammar, correct usage, vocabulary development, spelling, punctuation, capitalization, speaking and listening. Students will write narratives, persuasive pieces, analytical responses to literature, and a research assignment. Teachers emphasize student writing using a process approach, which involves multiple drafts, peer editing, and revision.

All aspects of the course are designed to help students to exceed the greater expectations for learning set forth in the New York State Common Core Aligned Standards for English Language Arts. Students are required to take the New York State Common Core English Language Arts Regents Assessment given at the end of the junior year.

0028 English 12

Credit: 1 Unit

Prerequisite: English 11

40 Weeks

This course develops students' understanding of fictional forms including the novel, short story, poetry, and drama, and with non-fictional forms such as the essay, the article, biography, and autobiography. There is also extensive poetry analysis and examination of rhetorical devices. This course requires students to employ higher order literacy and interpretive skills while they read widely, reflect purposefully, and discuss extensively the structure and purpose of works or recognized literary merit.

In this course, as with all English courses, there is a summer reading list with a related project that will be a component of the grade for the course.

There are required classroom texts and required outside reading texts. The course not only requires students to read extensively, but provides instruction in other components of the study of the English language: research techniques, grammar, correct usage, vocabulary development, spelling, punctuation, capitalization, speaking and listening. Students will write narratives, persuasive pieces, analytical responses to literature, and a research assignment. Teachers emphasize student writing using a process approach, which involves multiple drafts, peer editing, and revision.

0037/00038 ENG103/ENG104 OCC English

Credit: 1 Unit High School; up to 6 credits
OCC

Prerequisite: English 11 Honors and
Teacher Recommendation

40 Weeks

English 103 is a writing based course. Students will use the writing process to create several different types of essays. Students will read a variety of fiction and nonfiction pieces. English 103 culminates with a persuasive mini research paper. English 104 continues with rigorous writing assignments but also combines more reading with the hopes that students will develop an understanding of fictional forms including the novel, short story, poetry, and drama, and non-fictional forms such as the essay, the article, biography, and autobiography. There is also extensive poetry analysis and examination of rhetorical devices. This honors level course requires students to employ higher order literacy and interpretation skills while they read widely, reflect purposefully, and discuss extensively the structure and purpose of works of recognized literary merit.

The course not only requires students to read extensively, but provides instruction in other components of the study of the English language: research techniques, grammar, correct usage, vocabulary development, spelling, punctuation, capitalization, speaking and listening. Teachers emphasize student writing using a process approach, which involves multiple drafts, peer editing, and revision. There is a required research project that is used as a culminating project for English 103.

Students taking OCC English should be highly – motivated who read extensively and who enjoy writing.
There is NO CHARGE for OCC English 103 and 104.

0031 ILS153 OCC Integrated Learning Seminars

Credit: ½ Unit

Prerequisite: English 11 and Teacher
Recommendation

20 Weeks

This course presents techniques that help students cope successfully with the demands of college. Through participation in a variety of unique activities designed to empower students to meet life-career goals, ILS 153 – Integrated Learning Seminar creates an educational environment that fosters an appreciation for knowledge and study skills, research strategies, and ultimately student success. Students will become more efficient learners, self-aware with respect to academic and personal goals, and confident in their ability to manage academic challenges.

0035 WRT114 SUPA Writing Culture: Intro to Creative Nonfiction

Credit: 1 Unit High School, 3 SU Credits

Prerequisite: None

40 Weeks

SUPA WRT 114 – *Will fulfill the required ENGLISH 12 credit.* The course focuses on the genre of creative nonfiction. Students explore varieties of creative nonfiction, such as memoir; biography; the personal essay; travel, science, and food writing; and “new journalism.” As its name suggests, creative nonfiction borrows elements from fiction and poetry (e.g., description, scene construction, dialogue, etc.) yet still aims to tell the truth. This course allows students to experiment with creative writing in a nonfiction context. Students will have the opportunity to experiment with style, genre, and subject in a writing studio environment and to read varied examples of contemporary creative nonfiction. Students will craft and workshop their own creative nonfiction compositions.

The total cost is approximately \$330. Financial aid may be available.

0039 Comedy & Humor

Credit: ½ Unit

Prerequisite: Concurrent Enrollment in
English 12

20 Weeks

Students will explore comedy and humor's basic elements in traditional print, electronic media and dramatically staged formats to achieve greater knowledge of the social, cultural and serendipitous forces motivating people's laughter about life's funny circumstances. Specifically, pupils will familiarize themselves with comedy's significant history, vocabulary, genres, figures, styles, formats and purposes. By participating in the course,

pupils will have opportunities to read and discuss literature, view and critique films, write and act scenes, research and analyze comedic material or people, and produce humorous material (e.g., jokes, cartoons, commercials, stories, poems, etc.). While the course will help students to develop their skills in traditional New York State Standards in reading, writing, speaking and listening, the course activities will also provide them with a fun way to see humor in life's everyday moments. This elective will be scheduled during the same period that Journalism is scheduled so students can take two different half-year electives, in addition to English12R, and earn a sequence in English.

0901 English AIS

Placement in Academic Intervention Services (AIS) is determined either by the results of the 8th grade New York State Assessment in English or a failing grade on a Regents exam. This class, meeting every other day, provides additional support that supplements the instruction provided in the general English curriculum and assists students in meeting the State learning standards. AIS is intended to assist students who may be at risk of not gaining the requisite knowledge and skill required to meet or exceed designated performance levels on the State assessment. This program is based on Scholastic's READ 180. Students get intensive small group and individualized training in reading comprehension, decoding, spelling, fluency, and independent reading.

FAMILY & CONSUMER SCIENCE

0302 Clothing & Textiles
0303 Food & Nutrition
0304 Food & Fitness
0305 Culture & Foods
0307 Food Preparation

0308 Housing and Environment
0310 Child Psychology
0312 Human Development/Adolescent Psychology
0315 Applied Food Science I
0316 Applied Food Science II

0302 Clothing & Textiles

Credit: ½ Unit

Prerequisite: None

20 Weeks

Sewing is not so old fashioned and it's not only for girls, watch HGTV! It's a lot of fun, learning how to sew and making something to wear or update your bedroom. Learn about fashion and what styles and colors look the best. Learn to take care and repair the clothing you already own. You will learn from sewing on a button to fixing a hem to making something from a piece of fabric.

0303 Food & Nutrition

Credit: ½ Unit

Prerequisite: None

20 Weeks

Would you like to learn how to cook to survive or to become a chef, this course is for you. Students will learn the basics of cooking and baking foods. You will learn everything to make you a success in the kitchen from reading a recipe to measuring to different techniques or secrets in making delicious dishes. We bake quick bread, yeast breads, pasta, rice, omelets, soups, salads, casseroles, pies, cookies, and cakes just to name a few. We will also look at nutrition and study what food gives our bodies to function.

0304 Food and Fitness

Credit: ½ Unit

Prerequisite: None

20 Weeks

Feeling overtired and stressed? Do you want to learn how to be more energized and effective? This course will show you how your diet choices will affect your activity level. You will be introduced to Pilates, weight training, core-training, yoga, etc. You will study about the different nutrients and how they affect your ability to concentrate, feel good and keep your from illness. Through journaling, you will find out more about yourself and how food and exercise affect your total well-being. Hopefully you will be able to choose a diet and form of exercise that you will enjoy to help you reach and maintain your fitness goals.

0305 Culture & Foods

Credit: ½ Unit

Prerequisite: None

20 Weeks

We will travel around the world in this foods class. We will study about 12 different lands, customs, culture, traditions and celebrations. You will look at how their food cuisine is a reflection of their way of life. Everyone in class will research a country and learn about that country's cuisine. Weekly food labs will reflect each culture.

0307 Food Preparation

Credit: ½ Unit

Prerequisite: None

20 Weeks

Food Preparation is a course whose focus is the methods of preparing food, the functions of food in the body, and the recommended dietary guidelines for individuals throughout the lifespan. Students will research the history of food preparation methods and the development of food preparation equipment. They will investigate food-related issues such as the quality, quantity and safety of the food supply to make connections between food-related issues and advances in the food industry. Students will have the opportunity to examine the wide variety of career paths in food preparation and nutrition fiddles and identify the knowledge and skills necessary for success within these fields.

0308 Housing and Environment

Credit: ½ Unit

Prerequisite: None

20 Weeks

What will your house be like? Where will you live? Will you own or rent? What will the architectural style be? How will you decorate and at what cost? These are just a few of the questions students explore in HE. Students will complete an Interior Design Project on the Dream House, and learn about wall and floor coverings, lighting fixtures, windows and furniture. There are class assignments, group and individual projects, quizzes or tests used as assessments for Housing and Environment.

0310 Child Psychology

Credit: ½ Unit

Prerequisite: None

20 Weeks

Kids say the funniest things and they love teenagers! Students can be a special friend to a preschooler. Through observations and class discussions students learn about children from conception to five years of age. Students become experts on childcare – a good preparation for a future career either as a parent or in the field of Child Development. Students will design their own day care center, complete with toys, a schedule and a floor plan. Quizzes or tests are used to assess each unit of study. Students complete a Case Study on a child in our community.

0312 Human Development/Adolescent Psychology

Credit: ½ Unit

Prerequisite: 3 Units of Art and Teacher

20 Weeks

Approval

Senior Studio is an advanced art course designed for seniors who have successfully completed at least 3 high school art courses. Students must have an existing collection of work prior to entering this course and must complete a work-review with the instructor prior to signing up. Senior Studio provides an opportunity for seniors that are seriously interested in art to work independently and explore their artistic ideas, 2D and/or 3D, under the guidance of the instructor.

0315 Applied Food Science I

Credit: ½ Unit

Prerequisite: Living Environment/Biology

20 Weeks

Applied Food Science I introduces students to the science of food and nutrition. In the first half of the course, topics include the physical and biochemical aspects of food science (elements, compounds, bonding, physical/chemical reactions, elemental properties and their affect on food compounds, properties of water, acids, bases, pH and energy). Students are encouraged to gain an understanding of food and nutrition, as well as the social, technological, economic and environmental issues surrounding the purchase and production of food. Students will conduct experiments to help them gain an understanding of the scientific concepts behind nutrition and food processing.

0315 Applied Food Science II

Credit: ½ Unit

Prerequisite: Applied Food Science I,

20 Weeks

Living Environment/Biology

In Applied Food Science II, students will focus on the biological aspects of food science, including nutrition, metabolism, organic compounds and their molecular structures and properties, vitamins, minerals and leavening agents. Students will conduct experiments to help them gain an understanding of the scientific concepts behind nutrition and food processing.

FOREIGN LANGUAGE

0162 Spanish 1

0164 Spanish 2

0168 Spanish 3

0173 CCC SPA103 Spanish 4

0178 CCC SPA104 Spanish 5

0185 Italian 1

0186 Italian 2

0188 Italian 3

0190 CCC Italian 4

0191 CCC Italian 5

0162 Spanish 1, 0185 Italian 1

Credit: 1 Unit

Prerequisite: None

40 Weeks

This is the first course offered in a three-unit sequence leading to a Regents Diploma. This course is a requirement for students who have not met the NYS graduation requirement. Students may also use the first year of foreign language study as an elective for graduation upon completion of one foreign language sequence.

Students will learn to comprehend, speak, read and write a foreign language by learning grammatical structure and vocabulary in a foreign language. Students will be assessed on their ability to read short passages, write simple compositions, listen to short passages and speak in daily classroom activities. The student will participate orally and complete written assignments and projects. Cultural aspects of a foreign country such as beliefs, values, and customs are introduced and studied.

A final exam assessing the student's ability to read, listen to, write and speak in the foreign language will be administered.

To receive the high school credit and meet the NYS graduation students must pass the course and the final exam.

0164 Spanish 2, 0186 Italian 2

Credit: 1 Unit

Prerequisite: Spanish 1, Italian 1

40 Weeks

This is the second course offered toward a three-year sequence in foreign language leading to the Regents Diploma, or the Advanced Regents Diploma. This course extends the ability of students to understand, speak, read, and write a foreign language within the limits of structure and vocabulary. The more advanced structure of the language is presented and practiced intensely through speaking, listening, reading and writing. Vocabulary topics include technology, health and body, community and entertainment.

0168 Spanish 3, 0188 Italian 3

Credit: 1 Unit

Prerequisite: Spanish 2, Italian 2

40 Weeks

This course is the final of a three-year sequence in foreign language leading to the Regents Diploma with Distinction. Students learn to use complex grammatical structure and tenses in all communicative skills. Students are able to read complex texts such as magazine articles, newspaper articles, short stories, and short novels and they are able to write complex compositions. Students are able to speak spontaneously, read, listen and write for extended periods of time in the target language. Students continue in-depth study of the country's cultural aspects such as the history, art, and the lifestyle of the people. Students study the geography of the target language countries. Students are expected to complete daily assignments and to participate in daily oral expression. Students are required to take a Regional Assessment in the target language in June.

0173 CCC SPA103 Spanish 4

Credit: 1 Unit High School, 3 CCC Credits

Prerequisite: Spanish 3

40 Weeks

This course is for students who have successfully complete coursework in Level I, II, III. There will be a thorough review of grammatical structure through oral, written, listening and reading practice activities that are designed to increase the student's mastery of Spanish. Students are expected to do regular classwork, as well as, independent reading and projects. This is an immersion course that will explore the culture, history, music, art and geography of Spanish speaking countries.

0178 CCC SPA104 Spanish 5, 0191 CCC Italian 5

Credit: 1 Unit High School, 3 CCC Credits

Prerequisite: Spanish 4, Italian 4

40 Weeks

Improves understanding, speaking, reading, and writing through review and further study of grammar, readings, and video material on Hispanic civilization, people, and culture. Recommended for students with a year of college Spanish, high school Regents Spanish, or two strong years of high school Spanish. SPA103 is the prerequisite for SPA 104. CCC Italian 4 is the prerequisite for CCC Italian 5.

0190 CCC Italian 4

Credit: 1 Unit High School, 4 CCC Credits

Prerequisite: Italian 1, II, III

40 Weeks

This dynamic immersion course draws upon previously acquired knowledge, while introducing students to more complex grammatical structures to further develop communicative proficiency and cultural knowledge. This course is for students who have successfully completed coursework in Level I, II, and III and who have attained mastery on the Italian Regional Exam. There will be a thorough review of grammatical structure through oral, written, listening and reading practice activities that are designed to increase the student's mastery of Italian. Students are expected to complete regular class work, as well as, independent reading and projects. This course will explore culture, history, art, music and geography of Italy. This course provides a solid foundation for advanced study in Italian language courses at the intermediate-high level.

HEALTH

0657 Health

0662 Better Life-Better You

0663 Working on Wellness

0657 Health

Credit: ½ Unit

Prerequisite: None

20 Weeks

The Health Education course provides units of study that include promoting health throughout the life cycle, disease prevention, strategies that reduce the risk of potential health problems, and how society and culture influence the decisions a student makes about his/her health. In addition, there is a unit that meets the state parenting education requirement. Students are assessed on classroom work, projects, and a final exam.

**The New York State Education Department mandates one-half credit of Health Education for graduation.

0662 Better Life-Better You

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course is a Health Elective that will help students excel academically, build strong relationships and lead happier; healthier; more fulfilling lives. We will concentrate on developing awareness of positive and negative emotions, how emotions affect us in our lives, and how to express the emotions we feel. Students will also be self-reflective in regards to their own personal gifts and imperfections.

0663 Working on Wellness

Credit: ½ Unit

Prerequisite: Open to Grades 10-12

20 Weeks

This course will focus on the importance of healthy habits to maintain lifelong physical, mental, and emotional health. In this course, students will learn practical skills in managing a budget for a healthy lifestyle, understanding mental health and accessing mental health resources, maintain and grow healthy relationships, how to create realistic health goals at different stages of life, and how to make time for physical, mental and emotional health in a busy working schedule. Students will also learn health stress relief strategies and to overall be a healthier self. This course will combine health skills and physical fitness by practicing health enhancing behaviors and getting active in and out of the classroom. Students who want to learn lifelong skills to keep themselves health and happy; while also having fun, will find this course is suited just for them.

MATH

0140 Fundamentals of Algebra

0126 Algebra I

0127 Geometry

0146 Statistics

0147 Selected Topics in Advanced Math

0150 MAT143 OCC Pre-Calculus with Trigonometry H

0151 Robotics Engineering

0153/0157 Calculus I for College Credit

0154 Algebra II with Trigonometry

0156 Pre-Calculus with Trigonometry

0158 MAT104 OCC Algebra II with Trigonometry Honors

0225 Business and Personal Finance

0226 BUS102 OCC Finite Math for Business

0903 Math AIS

0140 Fundamentals of Algebra

Credit: 1 Unit

Prerequisite: Math 8

40 Weeks

This course is intended to build a foundation in beginning Algebra for students entering the high school whose past performance has been below average either on the NYS Math 8 assessment or Grade 8 Mathematics. This course builds fundamental concepts in a variety of topics, with the primary emphasis being algebra. Other topics include plane geometry, analytic geometry, ratio, proportion, probability and statistics.

0126 Algebra I

Credit: 1 Unit

Prerequisite: Math 8 or Fund of Algebra

40 Weeks

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. The critical areas include Relationships between Quantities and Reading with Equations, Linear and Exponential Relationships, Descriptive Statistics, Expressions and Equations, and Quadratic Functions and Modeling. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Students will be administered the NYS Algebra I Regents in June.

0127 Geometry

Credit: 1 Unit

Prerequisite: Algebra I

40 Weeks

The fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. The critical Areas include Congruence, Proof and Constructions; Similarity, Proof and Trigonometry; Extending to Three Dimensions; Connecting Algebra and Geometry through Coordinates; and Applications of Probability. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Students will be administered the NYS Geometry Regents in June.

0146 Statistics

Credit: 1 Unit

Prerequisite: Algebra II with Trigonometry
or Algebra II with Trigonometry Honors

40 Weeks

Statistics is a part of nearly every field of study, and as such is a requirement of nearly every college major. This course is intended to provide students with exposure to selected topics in the fields of probability and statistics. Topics covered may include the collection and presentation of data, sampling techniques, measures of central tendency and dispersion, elementary probability and distributions, hypothesis testing and confidence intervals. Computer software will be used.

0147 Selected Topics in Advanced Math

Credit: 1 Unit

Prerequisite: Algebra II with Trigonometry

40 Weeks

This course is designed to build algebra skills and prepare students to take a mathematics course in college. Skills that are learned in the 3-year sequence preceding this course are taken to a higher, more complex level. Functions and graphing are emphasized throughout the course to prepare students for a future higher-level course such as Calculus. Students learn to graph and recognize basic mathematical functions: linear, quadratic, cubic, logarithmic, exponential, and absolute value. Other topics may include complex numbers, systems of equations, sequences/series, matrices with determinates, graph theory, and polar coordinates.

0150 MAT143 OCC Pre-Calculus with Trigonometry Honors

Credit: 1 Unit/4 OCC Credits

Prerequisite: Algebra II with Trigonometry
Honors, Algebra II Regents Exam

40 Weeks

This course is designed to provide the necessary foundation for a standard calculus course. Topics include absolute value and quadratic inequalities, functions and their equations, use of matrices to solve linear systems, exponential and logarithmic functions and their applications, circular functions and their inverses, trigonometric identities and equations, addition and multiple-angle formulas, complex numbers, elementary theory of equations and binomial theorem. Students are encouraged to enroll in this course through the concurrent enrollment program at no cost and receive 4 hours of credit at Onondaga Community College.

0151 Robotics Engineering

Credit: 1 Unit

Prerequisite: Algebra I

40 Weeks

This course is designed for students who successfully completed a minimum of two years of high school mathematics and may provide students with their third unit in mathematics. Using the Engineering Design Inquiry Process, the course is designed to teach programming, behaviors, systems, control, sensors, feedback, applied inquiry, motivated design, communication technology, and scanning. Key Technology, Science, Engineering, and Math concepts will be addressed.

0153/0157 Calculus I for College Credit

Credit: 1 Unit High School, 4 College Credits

Prerequisite: OCC Pre-Calculus with Trigonometry

40 Weeks

This is a first course in the calculus for students planning to enroll in mathematics, science, computer science and engineering. Topics include basic analytic geometry, functions, limits and continuity, derivatives of algebra and trigonometric functions, chain rule, implicit differentiation, antiderivatives, definite integrals, Fundamental Theorem, applications of derivatives and integrals. Students are encouraged to enroll in this course to receive credit at SUNY ESF or OCC (To be determined)

0154 Algebra II with Trigonometry

Credit: 1 Unit

Prerequisite: Geometry

40 Weeks

This course is intended to develop college readiness through the development and extension of algebra skills. Topics will include Linear, Quadratic, Polynomial, Rational, Exponential and Logarithmic Functions with a focus on the connections between the functions and their graphs. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

0158 MAT104 OCC Algebra II with Trigonometry Honors

Credit: 1 Unit

Prerequisite: Score of at least 80 on the Geometry Regents Exam

40 Weeks

Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that student experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Students will be administered the NYS Algebra II Regents in June.

0156 Pre-Calculus with Trigonometry

Credit: 1 Unit

Prerequisite: Algebra II with Trigonometry

40 Weeks

Extending their understanding of complex numbers to points in the complex plane, students come to understand that multiplying a given set of points by a complex number amounts to rotating and dilating those points in the complex plane about zero. Matrices are studied as tools for performing rotations and reflections of the coordinate plane, as well as for solving systems of linear equations. Inverse functions are explored as students study the relationship between exponential and logarithmic functions and restrict the domain of the trigonometric functions to allow for their inverses. The year concludes with a capstone module on modeling with probability and statistics. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

0225 Business and Personal Finance

Credit: 1 Unit

Prerequisite: Algebra I

40 Weeks

This class teaches students a practical application of math. Students will learn how to calculate gross/net pay, interest, insurance, taxes, and consumer credit. Basic arithmetic operations, statistics, graphing and algebra are applied to these concepts as well as a range of others.

Completion of this class with a passing grade earns the student 1 credit but is part of both a business sequence and a math sequence.

0226 BUS102 OCC Finite Math for Business

Credit: 1 Unit High School, 3 OCC credits

Prerequisite: Algebra I

40 Weeks

Finite Math for Business is a study of mathematical concepts and processes as applied to business and finance. Students will develop skills to perform with accuracy mathematical operations integral to the interpretation and solution of business problems. Arithmetic operations, signed numbers, linear equations, percentage and statistical procedures, are applied to such topics as accounting, retailing, risk management, banking, and finance. Completion of this course with a passing grade earns the student 1 credit but is part of both a business sequence and a math sequence.

0903 Math AIS

Placement in Academic Intervention Services (AIS) is determined either by the results of the 8th grade New York State Assessment in Math or a failing grade on a Regents exam. This class provides additional support that supplements the instruction provided in the general Math curriculum and assists students in meeting the State learning standards. AIS is intended to assist students who may be at risk of not gaining the requisite knowledge and skill required to meet or exceed designated performance levels on the State assessment.

MUSIC

0600 Concert Chorus
0602 Vocal Jazz Ensemble
0604 Concert Band
0608 Jazz Band 9-11
0610 MUS151V OCC Jazz Band
0611 MUS152J OCC Jazz Band

0613 World Music and Today's Sound
0615 Music and Theatre Production
0617 MUS160 OCC Music Theory I
0618 MUS161 OCC Music Theory II
0619 MUS103 OCC Music Appreciation I
0620 MUS104 OCC Music Appreciation II

0600 Concert Chorus

Credit: 1 Unit

Prerequisite: Willingness to learn and sing

40 Weeks

Concert Chorus is a large vocal ensemble that rehearses five days a week and is open to all students. This course provides an opportunity for students to sing a wide variety of styles of music (classical, popular, etc.) written for 3 or 4 part, mixed chorus. Students are encouraged and challenged to grow both as individual and as ensemble performers. Concert participation is *mandatory*. Course requirement includes weekly attendance to a small group vocal lesson and daily practice. Concert Chorus meets the New York State Fine Arts requirement.

0602 Vocal Jazz Ensemble

Credit: 1 Unit

Prerequisite: Competitive Audition, Concert Chorus Participation

40 Weeks

Vocal Jazz Ensemble is a small vocal ensemble that rehearses five days a week and frequently performs both inside and outside the school district. It is a select organization designed to challenge and exercise the musical sensitivity and technical ability of the more advanced vocalists through the study of a wide variety of styles of jazz music. Students are encouraged and challenged to grow both as individual and as ensemble performers. Students will not only sing music but will learn how to *create* music through improvisation. Learning activities include critical listening of live and recorded jazz performances. Concert participation is *mandatory*. Vocal Jazz Ensemble meets the New York State Fine Arts requirement for graduation.

0604 Concert Band

Credit: 1 Unit

Prerequisite: Previous instrumental study or teacher recommendation

40 Weeks

Concert Band is a large instrumental ensemble that rehearses five days a week and is open to all students. Students are encouraged and challenged to grow both as individual and as ensemble performers. Concert participation is *mandatory*. Course requirements include weekly attendance at a small group instrumental lesson and daily practice. Concert Band meets the New York State Fine Arts requirement for graduation.

0608 Jazz Band 9-11

Credit: 1 Unit

Prerequisite: Competitive Audition and teacher recommendation, concert band participation

40 Weeks

Jazz Band is a small instrumental ensemble that rehearses five days a week and frequently performs both inside and outside the school district. It is a select organization designed to challenge and exercise the musical sensitivity and technical ability of advanced wind and rhythm section instrumentalists through the study of a wide variety of styles of jazz music. Students are encouraged and challenged to grow both as individual and as ensemble performers. Students not only play music, but also learn how to create music through improvisation. Other learning activities include aural skills, basic jazz theory, tune learning, and critical listening of jazz. Concert Band participation is required.

0610 MUS151V OCC Jazz Band/ 0611 MUS152J

Credit: 1 Unit

Prerequisite: Competitive Audition and teacher recommendation, concert band participation

40 Weeks

Jazz Band is a small instrumental ensemble that rehearses five days a week and frequently performs both inside and outside the school district. It is a select organization designed to challenge and exercise the musical sensitivity and technical ability of advanced wind and rhythm section instrumentalists through the study of a wide variety of styles of jazz music. Students are encouraged and challenged to grow both as individual and as ensemble performers. Students not only play music, but also learn how to create music through improvisation. Other learning activities include aural skills, basic jazz theory, tune learning, and critical listening of jazz. Concert Band participation is required.

0613 World Music and Today's Sound

Credit: ½ Unit

Prerequisite: None

20 Weeks

World Music and Today's Sound is a course that looks at the globalization of music from past to present. Students will engage in a variety of activities related to class discussions including listening, reading, music, composing and performing.

0615 Music and Theatre Production

Credit: ½ Unit

Prerequisite: None

20 Weeks

Music and Theatre Production looks at the creation, history, and development of the Broadway musicals and dramatic plays. Students will learn technical skills they can be applied in schools, communities, and professional theatres along with different job settings of the arts.

0617 MUS160 OCC Music Theory I

Credit: ½ Unit

Prerequisite: None

20 Weeks

This is course in basic music theory, including notation, scales, intervals, rhythmic elements, ear training, chords and modes. MUS160 is designed for the non-music major and/or prospective music major, as determined by an audition process.

0618 MUS160 OCC Music Theory II

Credit: ½ Unit

Prerequisite: MUS160 or Instructor Permission

20 Weeks

This course continues the studies of scales, intervals, key signatures, and chords. Compound meter and harmonization of melodies will be introduced.

0619 MUS103 OCC Music Appreciation I

Credit: ½ Unit

Prerequisite: Open to students in Grades 10-12

20 Weeks

This course is designed to introduce students to the basic elements of music with an emphasis on what to listen for in all music. The styles of important composers of the 18th and 19th centuries will be compared and discussed in relation to the cultural and historical background of the times in which they lived, as well as their impact and influence on the many styles of music we listen to today.

0618 MUS104 OCC Music Appreciation II

Credit: ½ Unit

Prerequisite: MUS104

20 Weeks

This course focuses on the diverse styles of music composed from the beginning of the 20th century through the present day, including European and American concert music, jazz, popular music, music for film and stage, and music of non-European cultures. Topics include the role that music plays in society, as well as its impact on other disciplines from advertising to medicine.

PHYSICAL EDUCATION

0659 Physical Education

0659 Physical Education

Credit: ½ Unit High School

Prerequisite: None

40 Weeks

The goal of our program is to have all students meet the state standards in Physical Education while participating in a diverse range of physical activities. The curriculum is designed to develop movement skills, promote character education, and acquire the knowledge base and commitment level for an active lifestyle.

Student's fitness is evaluated and areas of weakness are addressed. A variety of lifetime activities, team activities, as well as cooperative games are offered with an emphasis on fitness.

**Two units of Physical Education are mandated for Graduation. Units will be earned at a rate of ½ unit per year.

SCIENCE

0084 Physical Setting/Earth Science	0118 EFB120 Global Environment
0086 Physical Setting Earth Science Honors	0135 AP Physics I
0096 Living Environment/Biology	0136 Physical Science I
0099 Everyday Physics I	0137 Physical Science II
0101 Everyday Physics II	0138 Applied Science: Forensics
0103 General Chemistry I	0139 Marine Biology
0104 General Chemistry II	0141 Astronomy
0105 EFB101 General Biology I/EFB102 Laboratory	0142 Meteorology
0109 EFB103 General Biology II/EFB104 Laboratory	0143 Anatomy and Physiology
0106 Physical Setting/Chemistry	0144 Oceanography
0107 Chemistry H/PSE296 ESF Paper Engineering	0315 Applied Food Science I
0113 PHY103 OCC General Physics I	0316 Applied Food Science II
0116 PHY104 OCC General Physics II	0913 Science AIS

0084 Physical Setting/Earth Science

Credit: 1 Unit

Prerequisite: Living Environment/Biology 40 Weeks

Earth Science is the study of the solid earth, the water on it and the atmosphere surrounding it. Geology, Oceanography, and Meteorology are combined in study to completely understand the Earth. This course also explores Astronomy, the study of the universe. Earth Science provides a unique study of how hypotheses that cannot be tested in the laboratory are developed. The class meets 7-8 periods per week and a minimum of 1200 minutes of successfully recorded lab exercises is required.

0086 Physical Setting/Earth Science Honors

Credit: 1 Unit

Prerequisite: Accelerated Living Environment/Biology or appropriate classroom average with teacher recommendation 40 Weeks

Earth Science is the study of the solid earth, the water on it and the atmosphere surrounding it. Geology, Oceanography, and Meteorology are combined in study to completely understand the Earth. This course also explores Astronomy, the study of the universe. Earth Science provides a unique study of how hypotheses that cannot be tested in the laboratory are developed. The class meets 7-8 periods per week and a minimum of 1200 minutes of successfully recorded lab exercises is required.

This honors level course is offered to students in 9th grade and requires students to employ higher level thinking skill to understand Earth's many processes and the cause and effect relationships.

0096 Living Environment/Biology

Credit: 1 Unit

Prerequisite: None 40 Weeks

The Living Environment course is designed to have students understand and apply scientific concepts, principles, and theories pertaining to the living environment. Students are required to explain, analyze, and interpret biological processes and phenomena as they pertain to five major areas of study. Selected topics include homeostasis, reproduction and development, heredity and genetics, evolution and ecology. The class meets 7-8 periods per week and a minimum of 1200 minutes of successfully recorded lab exercises is required.

0099 Everyday Physics I

Credit: ½ Unit

Prerequisite: Living Environment/Biology, Integrated Algebra or Algebra I 20 Weeks

Everyday Physics I explores how physics plays a role in our everyday lives. We will explore the physics involved in transportation, amusement parks, sports and more. The course incorporates classroom and lab experiences in the study of motion, forces, energy, momentum, and rotational motion.

0101 Everyday Physics II

Credit: ½ Unit High School/3 OCC Credits

Prerequisite: Living Environment/Biology, Integrated Algebra or Algebra I, and Everyday Physics I 20 Weeks

Everyday Physics II looks at concepts such as electricity, magnetism and waves. Students will explore topics such as the electrical grid, how electricity is created, and the physics of music.

0103 General Chemistry I

Credit: ½ Unit

Prerequisite: 1 Year of Science

20 Weeks

General Chemistry I incorporates classroom and laboratory experience in the study of matter and elements. Topics include introduction to chemistry matter and energy, phase of matter, gas laws, atomic structure, periodic table and bonding.

0104 General Chemistry II

Credit: ½ Unit

Prerequisite: 1 Year of Science, General Chemistry I

20 Weeks

General Chemistry II incorporates classroom and laboratory experience in the study of the math of chemistry, solutions, acid/base, nuclear chemistry and organic chemistry.

0105 SUNY ESF EFB101 General Biology I: Organismal Biology and Ecology

Credit: ½ Unit High School, 4 SUNY ESF Credits

Prerequisite: GPA of 85 or above in previous science coursework; 3 units of science and assessments; teacher recommendation. Must also take EFB102*

20 Weeks

Three hours of lecture per week. Introductory exploration of biological principles at ecosystem, population, and organismal levels. Emphasis of form, function, diversity, ecology and evolution of living organisms. Fall Co-requisite: EFB102*

The total cost is approximately \$270.00. Financial Aid may be available.

*EFB102 General Biology I Laboratory

Three hours of laboratory per week. Major concepts of organismal biology and ecology will be reinforced with hands-on laboratory exercises and required field trips exploring the form, function, diversity, ecology, and evolution of living organisms.

0109 SUNY ESF EFB103 General Biology II: Cell Biology and Genetics

Credit: ½ Unit High School, 4 OCC Credits

Prerequisite: EFB101 General Biology I, GPA of 85 or above in previous science coursework; 3 units of science and assessments; teacher recommendation. Must also take EFB104**

20 Weeks

Three hours of lecture per week. Organization and function of living cells. Key topics include biological molecules, organelle structure and function, gene expression, cell division, metabolism, photosynthesis, cell signaling, genomics, population genetics, and evolution. Spring Co-requisite: EFB104**

The total cost is approximately \$270.00. Financial Aid may be available.

**EFB104 General Biology II Laboratory

Three hours of laboratory per week. Major concepts of cell biology and genetics will be reinforced with hands-on laboratory exercises using analytical and experimental techniques such as light microscopy, chromatography, electrophoresis, enzyme assays, aseptic culture techniques, and transformation of bacterial cells. Co-requisite: EFB103

0106 Physical Setting/Chemistry

Credit: 1 Unit High School; up to 6 credits OCC

Prerequisite: Physical Setting/Earth Science, Integrated Algebra or Algebra I

40 Weeks

Chemistry is the study of matter, its composition, properties and changes. Students understand and apply scientific concepts, principles and theories pertaining to the physical setting and recognize the historical development of ideas in chemistry. The ideas studied include the atomic makeup of matter and how it determines the observable characteristics, its reactivity, and energy changes. Students learn to work with graphs, charts, tables and measurements. The class meets 7-8 periods per week and a minimum of 1200 minutes of successfully recorded lab exercises is required.

0107 Physical Setting/Chemistry Honors/SUNY ESF PSE296 Paper Engineering

Credit: 1 Unit

Prerequisite: Physical Setting/Earth Science Honors, Integrated Algebra or Algebra I, Accelerated Living Environment/Biology or appropriate classroom average with teacher recommendation

40 Weeks

Students will be able to relate the makeup and properties of paper to the chemical and physical concepts studied in Regents Chemistry.

The total cost is approximately \$200.00. Financial Aid may be available.

0135 AP Physics I

Credit: 1 Unit

Prerequisite: Geometry, Integrated Algebra 40 Weeks
or Algebra I, Concurrent Enrollment in
Algebra 2/Trigonometry

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activities, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves.

There is a \$95 fee to take the AP exam.

0113 PHY103 OCC General Physics I

Credit: ½ Unit High School, 4 OCC Credits

Prerequisite: Geometry, Integrated Algebra 20 Weeks
or Algebra I, Concurrent Enrollment in
Algebra 2/Trigonometry

OCC PHY103 is a physics course emphasizing fundamental concepts and principles with a problem solving approach. Topics covered include kinematics and dynamics, Newton's laws, work and energy, momentum and rotational motion. Students have the option of taking the course through OCC for college credit. Must have a 70% lab average to receive college credit.

There is no charge for this course.

0116 PHY104 OCC General Physics II

Credit: ½ Unit High School, 4 OCC Credits

Prerequisite: PHY103 General Physics I, 20 Weeks
Geometry, Integrated Algebra or Algebra I,
Concurrent Enrollment in Algebra
2/Trigonometry

OCC PHY104 is a continuation of PHY103. Topics covered include: vibrations and wave motion, physical and geometrical optics, electricity and magnetism, and simple AC and DC circuits. Students have the option of taking the course through OCC for college credit. Must have a 70% lab average to receive college credit.

There is no charge for this course.

0118 EFB120 SUNY ESF The Global Environment and the Evolution of Human Culture

Credit: 1 Unit High School, 3 SUNY ESF
Credits

Prerequisite: Physical Setting/Earth 40 Weeks
Science, Living Environment/Biology,
Concurrent enrollment in Physical
Setting/Chemistry

This course is for students who have successfully completed a minimum of two years of High School science and at minimum concurrently enrolled in chemistry. Course topics include human population, sustainability, global perspective, the urban world, science and values and energy. The Global Environment will help you to gain the knowledge and tools to make informed decisions regarding the environment and the earth's future and be able to understand the connections between the previously listed topics.

The total cost is approximately \$200.00. Financial Aid may be available.

0136 Physical Science I

Credit: ½ Unit

Prerequisite: Living Environment/Biology 20 Weeks

Physical Science 1 is a continuation of the history and nature of science and allows students to explore the basic concepts of physical science. The course includes an introduction to the fundamental concepts of physics. Topics include measurement, force, motion, energy, waves, and magnetism. Upon completion, students should be able to demonstrate an understanding of their physical environment.

0137 Physical Science II

Credit: ½ Unit

Prerequisite: Physical Science I, Living 20 Weeks
Environment/Biology

Physical Science 2 is an introductory course designed to allow students to explore the basic concepts of physical science. Students will be introduced to the history and nature of science. They will also learn how to do proper lab procedures and measure by exploring mass, volume, and density. This course includes an introduction to the fundamental concepts of chemistry, astronomy, and earth science.

0138 Applied Science: Forensics

Credit: 1 Unit

Prerequisite: Living Environment/Biology 40 Weeks

This Applied Science course will review the methods used by police scientists to discover and analyze clues which help solve crimes. It is an academic course based on, and expanding the student's background in the sciences, by putting theories to practical use. The student will study

famous cases, learn how to collect evidence at the scene of the crime, and analyze evidence such as fingerprints, firearms, hair fibers, documents etc.

0139 Marine Biology

Credit: ½ Unit

Prerequisite: Living Environment/Biology 20 Weeks

This course is designed to introduce students to the ocean world. The marine environment will be explored as it relates to biology, geology, chemistry, and physics. Through laboratory activities, marine organisms will be explored relative to their functions, their different habitats, and effects of organism interactions. The topics studied will include: environmental issues, marine resources, and current research.

0141 Astronomy

Credit: ½ Unit

Prerequisite: Living Environment/Biology 20 Weeks

This course is an introductory study of the universe, solar system, stars, galaxies, and cosmology. Topics include examining the night sky, history of Modern Astronomy, gravity, spectroscopy, structure and origin of our solar system, planets, the sun, the moon, stellar evolution, stars, and galaxies.

0142 Meteorology

Credit: ½ Unit

Prerequisite: Living Environment/Biology 20 Weeks

This course will study the basic principles of meteorology. Topics may include: monitoring the weather through local weather stations, radars, and satellites, the interactions between temperature, air pressure, wind, humidity, and precipitation to create our weather, how to forecast the weather on a daily basis, severe weather, such as tornados, hurricanes, and thunderstorms/lightning, and global climate change.

0143 Anatomy and Physiology

Credit: ½ Unit

Prerequisite: Living Environment/Biology 20 Weeks

The course investigates the structure and function of the human body, including basic organization, biochemical composition and major body systems along with the impact of diseases on certain systems. Dissections and virtual dissections will be used to highlight various aspects of anatomy and physiology.

0144 Oceanography

Credit: ½ Unit

Prerequisite: Living Environment/Biology 20 Weeks

This course is a study of the basic principles of oceanography. Topics include the structure of the earth and the sea floor, the physics and chemistry of the oceans, atmospheric wind and ocean circulation, waves, currents, tides, marine animals and habitats, ecological concepts, and environmental concerns.

0315 Applied Food Science I

Credit: ½ Unit

Prerequisite: Living Environment/Biology 20 Weeks

Applied Food Science I introduces students to the science of food and nutrition. In the first half of the course, topics include the physical and biochemical aspects of food science (elements, compounds, bonding, physical/chemical reactions, elemental properties and their affect on food compounds, properties of water, acids, bases, pH and energy). Students are encouraged to gain an understanding of food and nutrition, as well as the social, technological, economic and environmental issues surrounding the purchase and production of food. Students will conduct experiments to help them gain an understanding of the scientific concepts behind nutrition and food processing.

0315 Applied Food Science II

Credit: ½ Unit

Prerequisite: Applied Food Science I, Living Environment/Biology 20 Weeks

In Applied Food Science II, students will focus on the biological aspects of food science, including nutrition, metabolism, organic compounds and their molecular structures and properties, vitamins, minerals and leavening agents. Students will conduct experiments to help them gain an understanding of the scientific concepts behind nutrition and food processing.

0913 Science AIS

Placement in Academic Intervention Services (AIS) is determined either by the results of the 8th grade New York State Assessment in Science, a failing grade on a Regents exam, or ineligibility to take the regents exam due to lab deficiency. This class meets on an every other day basis and provides additional support that supplements the instruction provided in the regular science curriculum. It also assists students in meeting the NYS Learning standards in science.

SOCIAL STUDIES

0040 Global History & Geography 9
0041 Global History & Geography 9 Honors
0048 Global History & Geography 10
0050 Global History & Geography 10 Honors
0056 U.S. History & Government
0065 HIS106/107 OCC American History

0067 Economics
0069 Government
0072 SOC101 SUPA Sociology
0074 PSY205 SUPA Psychology
0902 Social Studies AIS

0040 Global History & Geography 9

Credit: 1 Unit

Prerequisite: None

40 Weeks

The Global History and Geography course presented to incoming 9th graders is designed to provide students with the opportunity to study various regions and civilizations at a given time. It reinforces and expands upon the many concepts and themes presented in the middle school. It introduces many new concepts and themes that will continue to be explored in the 10th grade program. Due to its chronological approach, this course includes pre-historic beginnings to approximately the Age of Enlightenment.

0041 Global History & Geography 9 Honors

Credit: 1 Unit

Prerequisite: Teacher Recommendation,
Essay Required

40 Weeks

The Global History and Geography course presented to incoming 9th graders is designed to provide students with the opportunity to study various regions and civilizations at a given time. It reinforces and expands upon the many concepts and themes presented in the middle school. It introduces many new concepts and themes that will continue to be explored in the 10th grade program. Due to its chronological approach, this course includes pre-historic beginnings to approximately the Age of Enlightenment.

The 9th grade honors course will require a more rigorous and indepth investigation of historical topics. Students will be engaged in a variety of project based assignments to improve their skills in analytical and higher level thinking.

0048 Global History & Geography 10

Credit: 1 Unit

Prerequisite: Global History & Geography 9 40 Weeks

This course enables students to make global connections for an in-depth understanding of the basic themes and concepts presented in the 9th grade course. This course begins with the 1750's and continues chronologically to the present day. Students have the opportunity to apply the cognitive skills of history, political science, geography, economics, as well as other social sciences to the course content.

0050 Global History & Geography 10 Honors

Credit: 1 Unit

Prerequisite: Global History & Geography 9 40 Weeks

This course enables students to make global connections for an in-depth understanding of the basic themes and concepts presented in the 9th grade course. This course begins with the 1750's and continues chronologically to the present day. Students have the opportunity to apply the cognitive skills of history, political science, geography, economics, as well as other social sciences to the course content.

The 10th grade honors course will require a more rigorous and indepth investigation of historical topics. Students will be engaged in a variety of project based assignments to improve their analytical and higher level thinking skills.

0056 U. S. History & Government

Credit: 1 Unit

Prerequisite: Global History & Geography 9 & 10 40 Weeks

This course studies American History from colonial times to the present. A study of the Constitution is included. Emphasis in the course is on the technological development of America with its social, economic, and political implications. A chronological approach dominates the instruction of the course.

0065 HIS106/HIS107 OCC Early American History/19th Century History

Credit: 1 Unit

Prerequisite: 85 average or higher in
Global History 10 or 85 or higher on the
Global Regent Examination

40 Weeks

This course involves a more in-depth look at American History from the colonial period up until the present day. This is a college credit bearing course; therefore, students' homework assignments will include numerous readings from secondary and primary sources throughout the year on which they will be assessed. This course involved more essays and research papers than US History & Government Regents. This is an academically demanding course which requires a student to have excellent attendance along with a strong work ethic.

0067 Economics

Credit: ½ Unit

Prerequisite: U. S. History & Government 20 Weeks

This course gives students the opportunity to examine economics topics in considerable depth. The concept of capital formation, begun in earlier social studies courses, is continued. The relationship of capital formation under the corporate structure to the operation of the market system is studied. Financing corporations through the stock market, monopolies, and competitions are studied and explored.

0069 Participation in Government

Credit: ½ Unit

Prerequisite: U. S. History & Government 20 Weeks

This course presents students with the challenges of a democratic system of government and the opportunities to participate actively as citizens charged with the responsibility of helping to determine the outcome of various local, state, and national issues. Students will analyze, discuss, and debate a wide variety of contemporary public issues.

0072 SOC101 SUPA Introduction to Sociology

Credit: ½ Unit High School, 3 SU Credits

Prerequisite: Successful completion of U. S. History & Government, Concurrent Enrollment in Economics or Participation in Government 20 Weeks

Syracuse University Project Advance Sociology is designed as an analytic, skills based course in introductory sociology. The emphasis is on analytic reading and conceptual analysis. The approach to sociology is to view it as an empirical social science. Most of the readings are either empirically based or of an area of sociological investigation. It is a writing intensive course. Each unit consists of primary source readings. Individual and group projects are associated with the general themes of the units. Each student will be required to do a limited field observation and a literature review around a sociological question.

SUPA Sociology will provide high school students with the organizational and time management skills necessary to be successful in college. Students will experience the responsibility of mature decision-making with a minimal financial investment in order to receive a maximum college experience with three college credits.

The total cost is approximately \$345. Financial aid may be available.

0074 PSY205 SUPA Foundations of Human Behavior

Credit: 1 Unit High School, 3 SU Credits

Prerequisite: Successful completion of U. S. History & Government, Concurrent Enrollment in Economics or Participation in Government 20 Weeks

Syracuse University Project Advance Psychology is an innovative course which provides instruction in the fundamental topics in psychology. In addition, this course is designed to provide a degree of freedom for students to pursue individual topics of interest. As a survey course, it contains a wide range of topics such as: Learning, Memory, Cognition/Thinking, Motivation/Emotion, Personality, Psychological Disorders, and many others.

SUPA Psychology will acquaint students with the research methods and procedures that are required of college students. High school students will be given the opportunity to develop their oral and written communication skills. Most importantly, students will experience the responsibility of mature decision-making with a minimal financial investment. The result of such an undertaking provides students with the organizational and study skills important for a successful college career and three college credit hours.

The total cost is approximately \$345. Financial aid may be available.

0902 Social Studies AIS

Placement in Academic Intervention Services (AIS) is determined either by the results of the 8th grade final exam, teacher recommendation, or a failing grade on a Regents exam. This class, meeting 1-2 days per week, provides additional support that supplements the instruction provided in the general Social Studies curriculum and assists students in meeting the State learning standards. AIS is intended to assist students who may be at risk of not gaining the requisite knowledge and skill required to meet or exceed designated performance levels on the State assessment.

TECHNOLOGY

0509 Web Design
0510 Electricity/Electronics
0514 Residential Structures
0517 Computer Graphics I
0519 Computer Graphics II
0524 Materials Processing
0528 Architectural Drawing
0531 Coding: Games & Apps
0532 MET161 OCC Drawing & Design for Production
0541 Intro to Computer Science
0542 Manufacturing Systems
0545 Black & White Photography
0546 Digital Imaging

0547 MET150 OCC Principles of Engineering
0548 Computer Integrated Manufacturing
0549 The Internet of Things
0550 Robotics Design and Innovation
0551 General Carpentry
0552 Small Engine Mechanics
0553 Automotive Technology
0554 Creativity & Innovation
0555 Computer Animation
0556 Advanced Game Programming
0558 Transportation Systems
0559 Digital Photography

0509 Web Design

Credit: ½ Unit

Prerequisite: None

20 Weeks

Is there anything you can't find on the internet?!! How did all of that stuff get there? This introductory class explores just that: the planning, creation and implementation of basic web construction techniques to create a functional web site. Site mapping, interface production and site creation are covered. Construction of a site utilizing the Adobe Dreamweaver web editing software to produce templates, library items, tables, layers, frames, forms and HTML and CSS style sheets. Creating, processing, and optimizing graphics are stressed. As a final project, each student will use the skills acquired in the class to design and develop a personal web site.

0510 Electricity/Electronics

Credit: ½ Unit

Prerequisite: None

20 Weeks

This module is designed to provide an overview of electronics and electricity. Instruction is focused on basic electricity and electronics systems and emphasizes; semi-conductors; digital microprocessor; computer and medical applications; and circuit fabrication and experimentation. Students are required, by the end of the course, to complete homework assignments, show an understanding of electrical theory and component operation through the complete construction of a circuit to its point of operation including troubleshooting if necessary.

0514 Residential Structures

Credit: ½ Unit

Prerequisite: None

20 Weeks

Residential Structures is a study of the knowledge and skills required to both construct and maintain a residential building. Course content includes: construction (e.g. planning, framing, roofing), and maintenance (e.g. plumbing, insulation, electrical, flooring, drywall, window and door installation, and complete room renovation) required to successfully maintain a home. Students will be required, by the end of the course, to complete class construction of a shed (planning and construction) as well as complete many modules on basic home repair and maintenance. Knowledge acquired here could be used over the lifetime of any home owner. This course complements Architectural Drawing.

0517 Computer Graphics I

Credit: ½ Unit

Prerequisite: None

20 Weeks

Graphic design is the process of creating intelligent and powerful visual communication for print media and beyond. Want to create graphics that rock? This introductory course will emphasize the computer as a tool in the graphic, imaging and publishing industries. Class topics include vector imaging, typography, image capturing, and basic principles required to solve graphic design problems. During the course students will acquire the skills necessary to complete short assignments and extended projects using Adobe Illustrator software.

0519 Computer Graphics II

Credit: ½ Unit

Prerequisite: Computer Graphics I

20 Weeks

Continue the exploration of advanced production techniques to design graphic media for many applications. Computer Graphics II students do more advanced projects using Adobe Photoshop software. Topics will include photographic graphic design, image manipulation and applications. Throughout the course, students will become a "graphic design team" of problem-solvers who research and manage design projects, analyze needs/problems, and develop visual solutions.

0524 Materials Processing

Credit: ½ Unit

Prerequisite: None

20 Weeks

Materials Processing will give students an opportunity to investigate different processes used by both professionals and hobbyists in areas of woodworking, metalworking, and plastics. Several projects will be completed using each of these three materials as different methods (separating, forming, and combining) and tooling (hand tools and power tools) are explored. Students will be required to design and construct an individual finished product using some of the materials and processes studied.

0528 Architectural Drawing

Credit: ½ Unit

Prerequisite: None

20 Weeks

Architectural Drawing is an introductory course in residential architectural drafting and design using traditional board drawing techniques. This course includes residential historical influences, career exploration, and consumer aspects of building/purchasing and owning a home. Students will learn the components of a new structure from the ground up and how to graphically represent its construction with precise detail. The goal of the course is to explore in depth the techniques and conventions used in architectural drafting, to make familiar the basic types of drawings used in architectural drafting, and to sharpen architectural planning skills.

0531 Coding: Games & Apps

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course is for students who are interested in learning how to code by working in a real software development environment to design, program and publish mobile apps and games. Learning to code by creating real products, students discover how to make amazing things and have an impact on their world.

0532 MET161 OCC Design and Drawing for Production

Credit: 1 Unit, 3 OCC Credits

Prerequisite: None

40 Weeks

DDP is a course that literally offers something for everyone. Information received in this course enables students to communicate their creative ideas through the universal language of technical and computer-assisted design. Hands on case studies allow students to apply their newly acquired drawing skills while learning critical thinking and problem solving techniques. This versatile course is open to all innovative thinkers serving as a foundation for 3 and 5 unit sequences in Technology Education.

Note: Successful completion satisfies the high school Art/Music requirement for graduation.

0541 Intro to Computer Science

Credit: ½ Unit

Prerequisite: Algebra I

20 Weeks

This course is designed to be an introductory, college preparatory, computer science course. Students will investigate the entire breadth of the field of computer science through an exploration of engaging and accessible topics, including; human computer interaction, problem solving, web design, introduction to programming, computing and data analysis, robotics and the societal impacts of computing.

0542 Manufacturing Systems

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course covers the principles and procedures of various manufacturing processes used in modern industries. Materials selection and machine tools required for the processes are emphasized. The major categories of content include inputs, resources, processes, outputs and control.

0545 Black & White Photography

Credit: ½ Unit

Prerequisite: None

20 Weeks

Photography is an entry-level course into the study of silver-based imaging. This course introduces the student to the use of 35mm format photography to produce high quality black and white enlargements of a variety of subjects and scenic situations. Students gain experience in the use of 35mm format equipment (single lens reflex camera, supplementary lenses, flash units, light meters), film processing, enlarging and printing images on photo paper, paper processing, photographic composition, artistic expression, lighting techniques, and print mounting for archiving and display. Students are required to complete reading, research and writing assignments, 4 topic specific shooting assignments, and the assembly of a portfolio of their work as a final course project.

0546 Digital Imaging

Credit: ½ Unit

Prerequisite: None

20 Weeks

Modern photographers, web developers, and graphic designers, specifically those using network and Internet communications, use digital systems for higher productivity, quality, and diversity in creativity. The Digital Imaging course is designed to show students how to capture, edit and produce top quality digital images for combined utilization on network systems, the Internet, and output printing.

0547 MET150 OCC Principles

Credit: 1 Unit, 3 OCC Credits

Prerequisite: Geometry

40 Weeks

This course is a hands-on introduction to the engineering discipline/profession. Topics covered will include the following; an introduction to the various types of engineering majors and professions, engineering design and analysis methods, elementary engineering statistics and data analysis, computer literacy, working in a team setting, oral and written communications, use of practical engineering tools, and engineering ethics. Individual and group projects will cover the five major branches of engineering: Mechanical, Chemical, Civil, Electrical, and Environmental.

0548 Computer Integrated Manufacturing

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course applies principles of rapid prototyping, robotics, and automation. Students will use current computer software and computer controlled prototyping equipment, such as CNC mills, laser engravers, and 3D printers to solve problems by constructing actual models of their 3-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment.

0549 The Internet of Things

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course will cover the explosive growth of the "Internet of Things" and how it is changing our world. Topics covered include embedded systems, the Raspberry Pi Platform, and the Arduino environment for building devices that can control the physical world. In a final project, you'll apply the skills you learned by designing, building, and testing a microcontroller-based embedded system, producing a unique final project.

0550 Robotics Design & Innovation

Credit: ½ Unit

Prerequisite: None

20 Weeks

In this course, students will design, program and test innovative technological devices related to robotic systems. Topics involve mechanics, pneumatics, control technologies, computer fundamentals, and programmable control technologies. Students design, build and optimize robots to perform a variety of predesignated tasks. Individuals or small teams may choose to participate in organized robotic competitions or develop their own events during the course. Students will investigate all aspects of the industries related to robotics design and innovation and explore collegiate programs of study.

0551 General Carpentry

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course provides a basic introduction to construction work and the technical aspects of carpentry. Topics include safety, measurement, and the identification, selection, and use of tools, equipment, lumber, materials, and fasteners. Basic skills, leadership, career development, thinking and reasoning skills, mathematics, and principles of technology are reinforced. Hands-on activities provide many opportunities to enhance instruction and career development.

0552 Small Engine Mechanics

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course familiarizes students with the use of hand tools and small engines. Units of study include engine parts, systems and operation of the small engine. Lab orientation emphasizes safety, maintenance, and organization while allowing the student to disassemble and reassemble small engines. Students learn how to communicate on a technical level. Proper techniques and procedures in using tools, gauges, and precision measuring devices are followed. This course provides the entry-level skills required for more advanced study of engine and automotive technology.

0553 Automotive Technology

Credit: ½ Unit

Prerequisite: Successful completion of Small Engine Mechanics and/or Teacher Approval

20 Weeks

This course is designed to provide a broad base of technical knowledge and skills within the field of automotive technology. Topics include career awareness, work habits and attitudes, basic automotive electricity and electronics, the subsystems of the automobile, their functions and maintenance. Environmental impacts of automobile use and disposal, workplace relations, and consumer issues are explored. It is preferred, but not required that students taking this course have a driver's license and access to their own automobile.

0554 Creativity & Innovation

Credit: ½ Unit

Prerequisite: Be a junior or senior who has successfully completed at least 3 different courses within a specific technology education strand

20 Weeks

This is a course designed to serve as a capstone independent study semester project focusing on utilizing knowledge and skills acquired within a specific strand and digging deeper in order to recognize and explore interdisciplinary connections. A student in this class will work to explore the different methods of approaching creativity and innovation, and how this can help them to identify a problem that needs to be solved. Then throughout the semester the student will work through the steps of the design process to solve this problem.

0555 Computer Animation

Credit: ½ Unit

Prerequisite: None

20 Weeks

This course will introduce students to the basic techniques and approaches of digital animation to develop creative ideas through the moving image. Students will learn the basic skills of 3D digital animation by establishing a working knowledge of Pixar's Renderman 3D rendering software. Through a range of hands-on exercises, students will gain essential knowledge of using a storyboard, setting up and environment or composition and working with sound to create unique animated sequences.

0556 Advanced Game Programming

Credit: ½ Unit

Prerequisite: Successful completion of Coding: Games & Apps

20 Weeks

This course is a continuation of Coding: Games & Apps and will focus on advanced coding for game development. We will explore game visualizations and natural simulations and how to create these environments using the javascript programming language.

0556 Transportation Systems

Credit: ½ Unit

Prerequisite: None

20 Weeks

This module is designed to provide an overview of transportation with emphasis on land, marine, aerospace and futuristic modes. Instruction includes propulsion systems, power transfer systems, types of vehicles, mass transit, safety routes and instrumentation. Students are required, by the end of the course, to complete homework assignments, study all of the systems under each mode of transportation and using this knowledge construct a model vehicle of each mode to show the ability to use this knowledge to solve a problem.

0559 Digital Photography

Credit: ½ Unit

Prerequisite: None

20 Weeks

Students will be given an overview of traditional photographic techniques as they relate to digital imaging. Fundamental skills will include the planning and production of digital compositions that demonstrate an understanding of light, composition, color and visual impact. Students will learn the theory behind digital technologies, how to use a digital camera and related computer hardware and software, as well as how to edit and enhance an image using Adobe Photoshop® software, and consumer information about digital systems. Students will be loaned digital cameras and be given specific assignments designed to best demonstrate the capabilities of digital technology.