# **TABLE OF CONTENTS**

A Message from the Superintendent	3
CHSD Administration and Wellness Center Directory	4
Graduation Requirements	. 5-6
Schedule Planning	6
Unique Offerings for the High School Student	7-13
COURSE DESCRIPTIONS	
Art	14-16
Computer Science	17
Engineering	. 18
English	19-23
Health	24
Mathematics	25-27
Music	28-29
Occupational Education:	
Business Education	30-32
Family and Consumer Sciences	33
Physical Education	34
Science	35-38
Social Studies	39-42
Special Education	43
World Languages	44



#### **BOARD OF EDUCATION**

Nancy Kaplan, Ed.D., *President* Megan C. Ryan, Esq., *Vice President* 

Marion Blane Janet Goller Rosemarie Corless Nina Lanci Edward Corona Gina Piskin

> Michael Harrington Superintendent of Schools

#### NON-DISCRIMINATION STATEMENT

In compliance with the law, "The Bellmore-Merrick Central High School District, 1260 Meadowbrook Rd., N. Merrick, N.Y. 11566, hereby advises students, parents, employees, and the general public that it offers employment and educational opportunities, including vocational education opportunities, without regard to color, weight, race, national origin, ethnic group, religion, religious practice, disability, sexual orientation, gender identity or sex/gender, and genetics."

The district Title IX Coordinator, Mr. Eric Gómez, Mr. Eric Arlin and Ms. Emily Paluseo, are responsible for the activities relating to compliance with Title IX. Any of these officials may be contacted by writing to Central Administration, 1260 Meadowbrook Rd., N. Merrick, N.Y. 11566, or by calling (516) 992-1000.

Any student or employee in the school district who wishes to file a grievance (complaint) regarding alleged discrimination based upon gender (including color, weight, race, national origin, ethnic group, religion, religious practice, disability, sexual orientation, gender identity or sex/gender, and genetics) shall make such a complaint to a Dignity Act Coordinator or school building administrator in writing on forms available in any of the School Counseling and Wellness Centers.

The district Section 504 Coordinator, Mr. Eric Arlin, Executive Director of Alternative Education, is responsible for the activities relating to compliance with Section 504. This official may be contacted by writing to Central Administration, 1260 Meadowbrook Rd., N. Merrick, N.Y. 11566, or by calling (516) 992-1050.



#### **Dear Students:**

The Bellmore-Merrick Central High School District *Catalog of Courses* has been prepared to assist you in planning your educational program. A study of the contents will reveal the academic strength of the curriculum, as well as the wide range of curricular offerings. The many options will allow you to individualize your course of study and meet your objectives, needs, and interests.

Our faculty and staff are prepared to help you make the most of your opportunities. In selecting individual courses, please be aware of the various requirements of the New York State Board of Regents, especially your high school graduation requirements.

The district provides counseling services to help you, in consultation with your parents, choose the course offerings which best address the state requirements and are also appropriate to your academic interests and talents. Please take advantage of the services of our school district – school counselors, teachers, subject-area supervisors, and administrators – in discussing the many educational opportunities available to you.

Have a wonderful school year!

Sincerely,

Michael Harrington
Superintendent of Schools

# BELLMORE-MERRICK CHSD ADMINISTRATION SCHOOL COUNSELING AND WELLNESS CENTER DIRECTORY

CENTRAL ADMINISTRATION - 992-1000	
Mr. Michael Harrington	
Superintendent of Schools	992-1001
Mr. Scott Bersin	
Assistant Superintendent	992-1040
Ms. Mikaela Coni	
Assistant Superintendent	992-1020
Mr. Eric Gómez	
Assistant Superintendent	992-1011
SANFORD H. CALHOUN HIGH SCHOOL - 992-1300	
Ms. Nicole Hollings, <i>Principal</i>	992-1310
Ms. Danielle Amato, Assistant Principal	992-1306
Ms. Carol Cupo, Counselor	992-1329
Ms. Brianna Doran, Counselor	992-1338
Ms. Amanda Engel, Counselor	992-1318
Ms. Katherine Peck, <i>Counselor</i>	992-1323
Mr. Frederic Posner, Counselor	992-1322
Ms. Jennifer Racanelli, Counselor	992-1321
Mr. Brian Resnick, Counselor	992-1345
JOHN F. KENNEDY HIGH SCHOOL - 992-1400	
Mr. Gerard Owenburg, <i>Principal</i>	992-1410
Mr. Vincent Pisano, Assistant Principal	992-1406
Ms. Keely Coco, Counselor	992-1423
Ms. Elissa Germaine, Counselor	992-1421
Mr. Matthew Grasso, <i>Counselor</i>	992-1422
Ms. Jessica Miller, Counselor	992-1464
Mr. Frank Sansanelli, <i>Counselor</i>	992-1429
Ms. Courtney Waller, Counselor	992-1447
WELLINGTON C. MEPHAM HIGH SCHOOL - 992-1500	
Mr. Anthony DeMartinis, <i>Principal</i>	992-1510
Mr. Christopher Safina, <i>Assistant Principal</i>	992-1504
Ms. Jennifer DiPrima, <i>Counselor</i>	992-1523
Ms. Jaclyn Kratzer, <i>Counselor</i>	992-1527
Ms. Jacqueline Lever, <i>Counselor</i>	992-1528
Ms. Kathleen McCloat, <i>Counselor</i>	992-1521
Ms. Carol Murray, Counselor	992-1529
Ms. Liane Parker, <i>Counselor</i>	
Mis. Liane i ai kei, counstioi	992-1522
Ms. Kimberly Thorgersen, Counselor	992-1522 992-1524

Department Chairs are listed at the beginning of each subject area section. They can be reached by dialing the school and asking for them by name.

### **GRADUATION REQUIREMENTS**

Required Courses	Regents Diploma	Regents Diploma with Advanced Designation
Art or Music	1 Unit	1 Unit
Electives	3 ½ Units	1 ½ Units
English	4 Units	4 Units
Health	½ Unit	½ Unit
Mathematics	3 Units	3 Units
Physical Education	2 Units	2 Units
Science	3 Units	3 Units
Social Studies	4 Units	4 Units
World Languages	1 Unit	3 Units
Total	22 Units	22 Units

### **REQUIRED EXAMS**

<u>Students MUST earn a score of 65 or above in the following required exams</u>: (Students with disabilities should contact their school counselor for safety net, pathways, and other diploma options)

Regents Diploma <sup>2</sup>	Regents Diploma with Advanced Designation
English Language Arts Regents	English Language Arts Regents
Any one Math Regents	All three Math Regents Exams
Global History Regents	Global History Regents
U.S. History Regents	U.S. History Regents
Any one Science Regents	Two Regents in Science (Must include one in Life Sciences
	and one in Physical Sciences)
World Language <sup>1</sup>	World Language <sup>1</sup>
World Language Checkpoint A Exam	World Language Checkpoint B Exam
Students averaging 90% or better on	Students averaging 90% or better on all examinations
required Regents examinations will earn	required for a Regents Diploma with Advanced Designation
a <b>Regents Diploma with Honors.</b>	will earn a <i>Regents Diploma with Advanced Designation</i>
	with Honors.

<sup>&</sup>lt;sup>1</sup> Students identified as having a handicapping condition may be exempt from these requirements if a student's IEP states that such requirements are not appropriate. Students completing a five-unit sequence in the Arts (visual arts, music, dance, theater) or Career and Technological Education may also be exempt.

Students may satisfy testing requirements with SAT Tests or Advanced Placement exams. Please see your child's school counselor for additional information.

The best way to ensure that your child meets all graduation requirements is to speak with your child's school counselor. The school counselor is the best source for reviewing changing graduation requirements and discussing the various options for meeting those requirements.

<sup>&</sup>lt;sup>2</sup> Pathways to Graduation – "4 + 1" Regents Diploma Option: Effective January 2015, students will be allowed to substitute one of the two Social Studies Regents exams with a number of different Career and Technical Education (CTE) assessments or an additional Regents exam in either math or science, or the World Language Checkpoint B exam.

### ADVANCED PLACEMENT EXAMINATIONS

Students enrolled in Advanced Placement courses are required to complete the corresponding Advanced Placement examinations if they are to receive an Advanced Placement designation on their transcripts. The district currently charges a fee of \$101.00 for each Advanced Placement examination taken. The AP Seminar exam is \$147.00.

### STUDENT TRANSCRIPTS

### **Weighted Grades:**

"Weighted" grades appear on the transcripts of all students. Each course grade is "weighted" as follows:

Advanced Placement Courses
5 points added

➤ Honors, Accelerated, and Advanced Courses 2 points added

### **SCHEDULE PLANNING**

Typically, students elect courses leading to either a New York State Regents diploma or a New York State Diploma with Advanced Designation. Scheduling begins after Holiday Recess and continues through late January. Please review the information and feel free to contact your child's school counselor to discuss any scheduling concerns you have.

### UNIQUE OFFERINGS FOR THE HIGH SCHOOL STUDENT

#### **BROADCASTING PROGRAM**

The purpose of the Bellmore-Merrick Broadcasting Program is to enrich the educational experience of young people in the Bellmore and Merrick communities through an innovative curriculum, which focuses on the different aspects of the broadcasting field. The Bellmore-Merrick Broadcasting Program will capitalize on student interests, provide real world skills and experiences, and offer even greater college and career opportunities for our students. Housed at Mepham High School, the Bellmore-Merrick Broadcasting Program is available to students throughout the district. Students will have the opportunity to work with high-tech professional equipment in the district's brand new top-of-the-line broadcasting studio. Program participants will enroll in a number of course offerings that focus on experiential learning. Below are brief descriptions of courses in the program:

### **Broadcast Communications I (BC I)**

This full year course is an introduction to communication theories and tools. Students will gain background knowledge of pre-production planning, camera use, lighting, sound recording, and electronic editing.

#### **Broadcast Communications II (BC II)**

In this full year course, students will refine and expand skills learning in BC I and will gain advanced instruction in various programming formats. Additionally, the course will focus on organizational skills, writing skills, and professional communication skills.

#### **Broadcast Communications III (BC III)**

BC III will include instruction in advanced production techniques, interview techniques, and graphics design. Students will produce a short film and documentary. This course may be offered for college credit through Five Towns College.

#### **Broadcast Communications IV (BC IV)**

BC IV is a full-year Advanced Video Production course designed for seniors who entered Bellmore-Merrick Broadcasting in 9th grade. With the assistance of a teacher-mentor, students will synthesize learning of the theory and practice of television and motion picture editing from the Broadcast Communications course sequence to focus on individual production. Students will move from segment producing including all of its elements (writing, editing, recording and graphics) to producing entire shows and events. This course may be offered for college credit though Five Towns College.

#### Foundations of Broadcast Design (Year Course, 1 Unit)

This visual engineering class is an introduction to the visual arts, specifically tailored for the broadcasting curriculum. It will cover the elements and principles of art and design, expanding on the skills that will directly correlate to broadcasting. The students will focus on composition, photography, camera angles, lighting, and digital editing. They will also explore the graphic arts through the use of Adobe Photoshop, Illustrator, and After Effects. (*Note: This course is open only to those students accepted into the BMB program*).

Accepted students will begin this program as ninth graders and should plan to spend four years as full time students at Mepham High School. An application and interview will be required and reviewed in order to determine acceptance for the program. If space is available, tenth graders may apply for the program.

#### **CULINARY ARTS AND HOSPITALITY PROGRAM - (CHAMP)**

Students enrolled in the district's Culinary Arts and Hospitality Program at Kennedy High School will learn the art and science of quality food preparation and service. They will develop a solid foundation in cooking skills through actual work experience using standard recipes. Additionally, students will learn both basic and advanced techniques, studying safety, sanitation, nutrition, as well as the Nassau County Board of Health regulations. In addition to the courses offered in Family and Consumer Science, students will have the opportunity to take interdisciplinary courses in other departments. These will be ideal for students who wish to pursue a career in the "food industry," but not in the preparation of foods. The Culinary Arts and Hospitality Program offers students college credit; service learning opportunities, and community service programs. Accepted students will begin this program as ninth graders and should plan to spend four years as full time students at Kennedy High School. An application and interview will be required and reviewed in order to determine acceptance for the program. If space is available, tenth graders may apply for the program.

### **CHAMP Foundations (Year Course, 1 Unit)**

This required course takes students from basic knife skills to training in every kitchen station; it also provides real-world knowledge that will support them in any field in the culinary industry. Students will learn about kitchen safety and equipment, culinary terminology, chef's math and recipe reading, and knife skills. Students will work with fruits, vegetables, grains, poultry, red meat, seafood, and baked goods.

#### Bakeshop and Pastry Arts (Year Course, 1 Unit)

The primary focus of this required course is on baking, bread making, pastry arts, and garde manger (salads, terrines, and charcuterie) that will leave students with an in-depth understanding of food chemistry. Because of the scientific aspect of the course, students will explore and critically taste ingredients to learn how flavors and textures influence taste. In addition, students will learn the essential techniques of cakes and chocolate, highlighting the key ratios and methods. Students' abilities will progress through development of all the dough-based products from delicate strudel to tarts and puff pastries. Students will learn to prepare such yeast-raised classics as baguettes, brioche, pizza, and bagels.

#### Hospitality and Management (H.A.M.) (Year Course, 1 Unit, Grades 11, 12)

This introductory course covers management principles pertaining to human resources, individual behavior in organizations, employee motivation and performance, and business ethics within the Culinary & Hospitality Industry. Topics also include managing and the manager's job, planning and decision making, employee performance appraisal and feedback, leadership and influence processes, interpersonal relations and communication, and managing work groups and teams. This course can be taken for college credit.

#### Classic Cuisine and Techniques (Year Course, 1.5 Units, Grades 11, 12) - (offered alternating years)

This course will afford the upper class students enrolled in the CHAMP Program with an opportunity to further develop their understanding and technical prowess in the preparation and presentation of food as it applies to the standards of today's culinary industry. Classic Cuisine and Techniques will provide students with an industry rich experience and "classical" training in all aspects of the food service operation.

#### Culinary Trends and Global Fare (Year Course, 1.5 Units, Grades 11, 12) - (offered alternating years)

This course is designed to take the CHAMP upper class students enrolled in the program to the next level of their culinary and hospitality training. The course delves deeper into the industry in the hopes of providing a greater opportunity to develop their understanding and technical prowess in the preparation and presentation of food as it applies to the classical and contemporary standards of today's culinary industry. The Culinary Trends and Global Fare course will provide students with a deeper service-based learning experience within the culinary industry and their "classical" training in all aspects of the foodservice operation.

#### Studio in Art - CHAMP (Year Course, 1 Unit)

This course is a version of the traditional Studio in Art class specially tailored to align with the curricular work taking place in our Culinary and Hospitality program. Students are introduced to traditional visual arts topics in color, design, media, methods of drawing & Painting through specifically designed projects and assignments. This angle will help further develop their artistic eye as it pertains to this particular field of study. (*Note: This art course is open only to those students accepted into the CHAMP program*).

#### **DRAMATIC ARTS PROGRAM**

A variety of course offerings are available to meet the needs of all students who wish to investigate art as a means of self-expression, creative problem solving, and visual communication. The Calhoun High School "On Tour" Program is available to students throughout the district.

This award-winning program in dramatic arts, started in 1974, aims to enhance the growth of well-rounded students as they progress through the many areas of theatre arts. The student of theatre learns criticism, history, and language through the study of play structure and play writing. The art of technical theatre teaches set, lighting, sound design, and manual skills. Interpersonal communication is taught through the study of scripts and practical application in voice, improvisation, acting, directing, and play production. Training in dance, movement, computer skills, publicity, video, and multimedia are also provided through the theatre courses. An important part of the program is the after-school rehearsal that will prepare for a variety of performances. The variety of productions includes a Shakespearean play, a major musical, as well as full length works performed in the Little Theatre.

Students should begin this program as ninth graders and should plan to spend four years as full time students at Calhoun High School. An audition/interview workshop and middle school experience are reviewed in determining acceptance for the program. If space is available, tenth graders may enter the program with strong evidence of prior participation and demonstrated ability in drama. **Drama 1 may be used to satisfy the art/music requirement.** 

#### **COSMETOLOGY PROGRAM**

The Cosmetology program is available to all 11<sup>th</sup> and 12<sup>th</sup> grade students in the Bellmore-Merrick Central High School District. Cosmetology 1 is offered to 11<sup>th</sup> grade students, and Cosmetology 2 is the continuation of the program offered to 12<sup>th</sup> grade students. Each is a three-period course. These courses are part of a NYSED CTE approved pathway.

The program is held at Calhoun High School where the classroom is structured as a working salon. The program consists of one (1) 100-hour Cosmetology program which prepares the student for the New York State exam. Upon successful completion of the program and exam, students will graduate high school as licensed cosmeticians, hairdressers, manicurists, and hair coloring specialists, and ready for employment in this vocation. Students will also be performing actual work on community customers each week. Upon completion, many students begin their careers, while others choose to attend college pursuing degrees in business and related fields.

#### **THE SENIOR EXPERIENCE**

The Senior Experience provides students with an opportunity to explore a variety of career options including out-of-school internships and/or activities based upon the individual interests of each student. Each building's Senior Experience is unique and designed to meet the needs of its students. For complete information on the Senior Experience program in your school, please speak to your school counselor.

#### **PATHWAY TO ENGINEERING**

The Pathway to Engineering sequence in Bellmore-Merrick is rooted in a STEAM philosophy which integrates Science, Technology, Engineering, Art, and Mathematics. Beginning in the seventh grade, our Technology 7 students are introduced to the concepts and skills of digital citizenship, computer literacy, and coding. The Technology 8 course explores technological innovations and promotes creative problem-solving in the areas of traditional construction with hand and power tools, technical drawing and computer aided design, 3D printing, and VEX robotics. This middle school technology component provides a strong foundation for further STEAM learning in high school. The high school elective courses in this strand include *Design and Drawing for Production* (DDP), *Foundations of Engineering* (FOE), *Principles of Engineering* (POE), and *Digital Electronics* (DE). The sequence is designed to introduce students to the scope, rigor, and discipline of engineering prior to college. These elective courses promote innovation, analytical thinking, and real-world problem solving as students are engaged with relevant, hands-on activities and project-based learning design challenges that put theory into practice. College credit is available for POE and DE in the 11th and 12th grade through an affiliate University. The Engineering elective sequence is offered in all three high schools.

#### **VIRTUAL ENTERPRISE**

*Virtual Enterprise* is a course that allows students to experience, in a simulated business environment, every aspect of a business, including human resources, accounting, production, distribution, marketing, and sales. This workplace

simulation enables students to understand how employees, workgroup teams, and departments interact with each other and work together for the success of the company.

#### **ELECTRICAL TRAINING PROGRAM**

The Bellmore-Merrick CHSD Electrical Training Program, in association with the Electrical Training Center Inc., is designed to develop the skills and knowledge necessary for students to enter the electrical trade field. The BMCHSD, in our continued effort to support student success, is offering this program, **free of charge**. Upon completion of this program, students will receive the following:

- 600 hours (2 years) of Electrical Training with Certified Electrical Teachers
- Renewable Energy & Green Energy: Wind, Solar
- Lighting controls
- Micro Credentialing from Manufacturing training
- Heat pump Technology
- Fire Alarm
- Generators
- Electrical Training Institute Center Certification of Completion
- OSHA Training for Construction Electrical
- Habitat for Humanity participation Certificate for Community Outreach
- Access to numerous partnerships with private contractors and local unions who collaborate with the ETC
- 3 Elective Credits of Independent Study towards NYSED Graduation Requirements each year

#### The Electrical Training Program starts in 11th Grade and is a 2-year program totaling 600+ hours.

The Bellmore-Merrick CHSD is offering a 2-YEAR Program starting in Junior Year. Students will earn all of the above items. The program is held in the Brookside Building in our Electrical Training Lab. The program is a rigorous 37 week course **each year**, and classes are held Monday thru Friday from 7:45am-10:15am for Juniors, and 11:45am-2:15pm for Seniors. Transportation is provided to and from the program to and from the students' home school. Interested students are required to complete an application, as space is limited.

This program will also address the transition from training to careers, including, but not limited to, working with contractors, manufacturing, sales, business enterprises, and security systems.

Any interest in this program should be brought to the attention of the student's guidance counselor. Together they can fill out and submit an application.

For additional information, go to the Bellmore-Merrick Website: <a href="https://bellmoremerrick.electricaltrainingcenter.edu/">https://bellmoremerrick.electricaltrainingcenter.edu/</a>

#### **NASSAU BOCES**

#### **Barry Tech/GC-Tech Career and Technical Education**

Opportunities are open to all juniors and seniors. Valuable hands-on vocational experiences are offered in many areas including Arts and Humanities, Health Services, Human and Public Services, and Natural Agricultural Science. Students enrolled in Barry Tech or GC-Tech attend classes for 2 ½ hours daily in the dedicated vocational area of their choosing. Full course descriptions are available on the following website: <a href="https://www.barrytech.org">www.barrytech.org</a>

#### Long Island High School for the Arts (LIHSA)

Due to the extensive district wide course offerings in Bellmore-Merrick, the district only participates in the Dance program at Long Island High School of the Arts. This program is open to juniors and seniors. Full course description is available on the following website: <a href="https://www.nassauboces.org/lihsa">https://www.nassauboces.org/lihsa</a>

\*Due to district programs, Bellmore-Merrick does not subscribe to all cooperative educational services programs.\*

#### **HIGH SCHOOL COURSES for COLLEGE CREDIT**

For selected courses, students may be able to participate in a variety of Dual Enrollment Programs. Inasmuch as the specific course(s) may change each year, students are advised that the applicability of college course credit may only be assured at the beginning of the school year. Students and parents should be advised that in order to receive college credit, there are fees which must be paid to the college or university, and that students must meet certain academic criteria. These credits may be transferrable to other universities. Parents should check with individual colleges and universities to determine if credit is transferable. We do not list these universities because individual schools may at any time change their policies concerning acceptance of Dual Enrollment course credit.

	Dual Credit College Course Offerings					
BMCHSD Infinite Campus Course #	COLLEGE COURSE CODE	COURSE	COLLEGE	# OF CREDITS	COST PER CREDIT	COMMENTS
BUS1001	BUS 101	College Accounting*	Farmingdale	3	\$150 for 3 credits	*Students who qualify
BUS1000	BUS 131	College Marketing 1*	Farmingdale	3	\$150 for 3 credits	for free/reduced lunch will have reduced
BUS1005	BUS 141 BUS 111	Virtual Enterprise*	Farmingdale	6	\$300 for 6 credits	registration For Farmingdale Courses only*
COM1060	AI 162	Artificial Intelligence	LIU	3	\$290 per course	
BRC1100	MAC121	Broadcast Comm. III	Five Towns College	3	\$50 per course	
BRC1200	VID131	Broadcast Comm. IV	Five Towns College	3	\$50 per course	
ART1057	VISL 1	Digital Art & Design 1	LIU	3	\$290 per course	
ART1250	VISL 3	Digital Art & Design 2 - Advertising	LIU	3	\$290 per course	
ART1159	CGPH12	College 2D Animation	LIU	3	\$290 per course	
ART1151	ART 5	College Drawing & Painting 3	LIU	3	\$290 per course	
ART1152	ART 13	College Drawing & Painting 4	LIU	3	\$290 per course	
ART1153	ART 35	College Sculpture 3	LIU	3	\$290 per course	
ART1154	ART 36	College Sculpture 4	LIU	3	\$290 per course	
ART1156	ART 19	College Photography 3	LIU	3	\$290 per course	
ART1157	ART20	College Photography 4	LIU	3	\$290 per course	
BUS1002	LAW 13	College Business Law	LIU	3	\$290 per course	
MUS1130	MUS107A and MUS106A	College Music Theory	LIU	3	\$290 per course	
ENG1054	ENG 182	Creative Writing	LIU	3	\$290 per course	
ENG1064	ENG186	Social Media & Blogging	LIU	3	\$290 per course	
ENG1050	JOU40	College Journalism	LIU	3	\$290 per course	
INT1001	SOC 7	Voices of the Past – English	LIU	3	\$290 per course	
INT1002	SOC 35	Voices of the Past- Social Studies	LIU	3	\$290 per course	

BMCHSD Infinite Campus Course #	COLLEGE COURSE CODE	COURSE	COLLEGE	# OF CREDITS	COST PER CREDIT	COMMENTS
SPN1200	SPA 1010 and SPA 1020	College Spanish	Molloy	6	\$300 per 3 credits	
ITA1200	ITA 1010 and ITA 1020	College Italian	Molloy	6	\$300 per 3 credits	
MAT1200	MAT 118	College Pre-Calculus	Molloy	3	\$300/course	
MAT1210	MAT 118	College Pre-Calculus H	Molloy	3	\$300/course	
SCI1154	ETCS 105	Principles of Engineering	NYIT	2	\$200 for 2 credits	
SCI1153	CSCI 135	Digital Electronics	NYIT	3	\$285 for 3 credits	
COM1052	CTEC 315	Java Mobile Apps	NYIT	3	\$285 for 3 credits	
BUS1010	HMT 1000	Hospitality & Management-HAM*	St. John's	3	\$325 per course	
ENG1052	COM 1001	College Media	St. John's	3	\$325 per course	
ENG1053	SPE 1000C	College Public Speaking	St. John's	3	\$325 per course	
SCI1150	BIO 1050	College Genetics	St. John's	3	\$325 per course	
SCI1052	BIO 1008	College Human A & P	St. John's	3	\$325 per course	
MAT1250	MTH 1000C and MTH 1040	College Finite Math	St. John's	6	\$325 per 3 credits	
SOC1055	SOC 1000C	College Sociology	St. John's	3	\$325 per course	
FCS1006	CUL105	Culinary Cuisine & Techniques	Suffolk County CC	3	\$65 per credit	Course runs on alternating years for 11 <sup>th</sup> and 12 <sup>th</sup> grade
SCI1071	CAS 109	ASR 3-Summer Mentorship	SUNY Albany	2	\$190/course	Juniors
SCI1170	CAS 110	ASR 3	SUNY Albany	4	\$190/course	Juniors
	CAS 209	ASR 4-Summer Mentorship	SUNY Albany	2	\$190/course	Seniors
SCI1270	CAS 210	ASR 4	SUNY Albany	4	\$190/course	Seniors

### Links for colleges:

 $\frac{https://www.ftc.edu/about-five-towns-college/consumer-information-student-right-know/dual-enrollment-agreements/https://www.stjohns.edu/admission/other-programs/college-advantage-program}$ 

https://www.liu.edu/post/High-School-Scholars-Program

https://www.farmingdale.edu/university-in-the-high-school/

https://www.molloy.edu/admissions-aid/first-year-admissions/info-for-families/pre-college/scholars-program

http://www.albany.edu/uhs/

Five Towns College St. John's University LIU Post SUNY Farmingdale Molloy University SUNY Albany

# ART - Cheryl Fontana, Director

A variety of course offerings are available to meet the needs of all students who wish to investigate art as a means of self-expression, creative problem solving, and visual communication. All students must have 1 unit of art or music in order to graduate. Please note: Students may take a 5-unit art sequence in order to fulfill certain requirements for the Regents Diploma with Advanced Designation.

- **STUDIO IN ART (Year Course, 1 Unit, Grades 9, 10, 11, 12)** This course is an introduction to the visual arts. It makes students aware of their potential, stimulates them to observe the environment, and equips them with a strong visual vocabulary to help communicate their ideas. Color, design, media, and methods of drawing and painting are explored.
- THE "ART" OF WELLNESS (Semester Course, ½ Unit, Grades 10, 11, 12) This is a half year, every day course in which students will have the opportunity to explore their creativity using non-traditional art forms. A perfect setting for those students who would like to reap the wellness & relaxation benefits of an art class, but who may not have the foundation drawing/painting skills, this class allows students to de-stress and be creative through use of multiple art techniques as well as exploration of current art trends on social media. NO PREREQUISITE.
- **DRAWING AND PAINTING 1** (Semester Course, ½ Unit, Grades 10, 11, 12) This course will address a wide range of advanced drawing and painting techniques. As a natural progression from Studio in Art, students will utilize and build upon learned skills. A variety of explored media will include charcoal, ink, pastels, acrylic paint, colored pencil, graphite, and more. Students will have the opportunity to experiment, think independently, and develop a personal style. **Prerequisite**: Studio-in-Art, Design and Drawing for Production (DDP), or teacher approval.
- DRAWING AND PAINTING 2 (Semester Course, ½ Unit, Grades 10, 11, 12) This course builds upon the experience of Drawing and Painting 1. Students will explore a variety of media and techniques to further develop their personal artistic expression. Media may include acrylic and watercolor paint, ink, charcoal, graphite, pastel, mixed-media, and more. Prerequisite: Drawing and Painting 1.
- *COLLEGE DRAWING AND PAINTING 3* (Semester Course, ½ Unit, Grades 11, 12) This course offers students the opportunity to use drawing and painting in new and exciting ways. Students will use observational drawing coupled with creativity and concept to create imaginative, expressive, and conceptual works. Experimentation with art media and mark making may include may include pencil, charcoal, ink, conté crayons, pastels, acrylic and oil paint. *This course is being offered with the option to earn 3 college credits.* Prerequisite: Drawing and Painting 2.
- COLLEGE DRAWING AND PAINTING 4 (Semester Course, ½ Unit, Grades 11, 12) In this advanced drawing and painting course, students will further develop their skills and experience with a variety of media and techniques. Emphasis will be placed on creative and individual approaches to one's art. Towards the end of the semester, students will begin to research and create a thematic concentration of work. Students will reflect, analyze, and critique their works and the works of others. This course is being offered with the option to earn 3 college credits. Prerequisite: Drawing and Painting 3.
- ADVANCED DRAWING AND PAINTING (Year Course, 1 Unit, Grade 12) As the third year in the Drawing and Painting sequence, this course will build upon existing art skills and introduce new advanced techniques. The focus will be on portfolio development which represents the culmination of the students' entire high school art experience that could also be used to supplement college applications. Prerequisite: Drawing and Painting 4
- ADVANCED PLACEMENT ART AND DESIGN (Year Course, 1 Unit, Grade 12) This is the highest level art course in the district. Students will develop a portfolio of artwork that fulfills the requirements of the College Board. Students will be encouraged to develop their own styles and produce a body of work that reflects their interests, concerns, and personalities. While learning advanced techniques, students will have tremendous freedom to choose their own direction, techniques, and media. Prerequisite: Drawing and Painting 4, Photography 4, or Sculpture 4.

# **ART** - Cheryl Fontana, Director

- COLLEGE Digital Art & Design 1 INTRO TO CREATIVE SUITE (Year Course, 1 Unit, Grades 10, 11, 12) This course provides students with a comprehensive overview of three of the most popular design platforms and their role in the production of visual and graphic designs. Through a dynamic art-based curriculum, students will explore the technical and artistic elements of the Adobe Creative Suite (Photoshop, Illustrator, and InDesign) and explore how they ultimately relate to visual communication. A must for beginners, this course provides the technical foundation required for any student interested in visual media, as well as students focused on pathways, careers, or certifications for future graphic designers, graphic artists, artists, illustrators, or business and advertising specialists. This course is being offered with the option to earn 3 college credits.
- COLLEGE Digital Art & Design 2 ADVERTISING (Year Course, 1 Unit, Grades 11, 12) In this full year course, students will be continuing their work with the Adobe Creative Suite with a specific focus on Advertising. This class will encourage creative innovation while stressing strong conceptual skills to prepare students for a variety of careers in the advertising and business worlds. Through advanced application of the three platforms studied in Creative Suite 1, Photoshop, Illustrator, and InDesign, students will work individually and cooperatively to explore dynamic design solutions for products and services. Projects may include print advertising, CD covers, logo design, packaging and display, etc. This course is being offered with the option to earn 3 college credits. Prerequisites: Creative Suite 1 or recommendation by an art teacher.
- *SCULPTURE 1* (Semester Course, ½ Unit, Grades 10, 11, 12) This course is an introduction to three-dimensional design. Building techniques using media such as clay and plaster will be utilized. Students are encouraged to think independently, use creative problem solving skills, and experiment.
- SCULPTURE 2 (Semester Course, ½ Unit, Grades 10, 11, 12) Students will continue to hone their skills working with three-dimensional media. They will learn various ways to be expressive and create three-dimensional works that are meaningful and exciting. Media explored may include clay, plaster, wood, metal, and more. Prerequisite: Sculpture 1.
- COLLEGE SCULPTURE 3 (Semester Course, ½ Unit, Grades 11, 12) The Sculpture 3 students will explore ways to better express emotion, create narrative, and be more symbolic in their sculptures. There is more freedom for students to go in their own direction while developing a concentration of works with a connecting theme. This course is being offered with the option to earn 3 college credits. Prerequisite: Sculpture 2.
- COLLEGE SCULPTURE 4 (Semester Course, ½ Unit, Grades 11, 12) Students will continue to develop their own styles, push the limits of scale and size, and explore new media such as stone, wood, and welding. Students will be inspired by sculptors throughout history and work in many styles from realism to abstraction. This course will both refine technical skills and stretch student concepts of what is possible. This course is being offered with the option to earn 3 college credits. Prerequisite: Sculpture 3.
- \*ADVANCED SCULPTURE (Year Course, 1 Unit, Grade 12) As the third year in the Sculpture sequence, this course will encourage students to be independent and grow as individual artists. They will develop their portfolios through the exploration of advanced 3-D design techniques, as well as the creation of a concentration of their choosing.
   \*Students will have the option to create an Advanced Placement portfolio with the chance to receive AP credit. Prerequisite: Sculpture 4
- **PHOTOGRAPHY 1 (Semester Course, ½ Unit, Grades 10, 11, 12)** This is a foundation course where students will be exposed to the magic of film photography. They will explore all facets of the fine art print, from basic SLR camera operation, to negative development, to printmaking. Compositions, lighting, and darkroom techniques will be emphasized.
- **PHOTOGRAPHY 2** (Semester Course, ½ Unit, Grades 10, 11, 12) In this course, individual photographic exploration will be encouraged. Students will refine their darkroom skills while learning advanced processes and applications. Students may have an opportunity to work in the digital realm. **Prerequisite:** Photography 1.

# ART - Cheryl Fontana, Director

- *COLLEGE PHOTOGRAPHY 3* (Semester Course, ½ Unit, Grades 11, 12) In this advanced level course, studio practice can range from pinhole to pixel, or both. Photographic techniques and skills will be incorporated with technological advancements in the field, including computer facilitated work. Students will become well-versed in Adobe Photoshop, learning the secrets of digital enhancement. *This course is being offered with the option to earn 3 college credits.* Prerequisite: Photography 2.
- *COLLEGE PHOTOGRAPHY 4* (Semester Course, ½ Unit, Grades 11, 12) Students will continue to utilize techniques and skills acquired in Photography 3. After investigating how photography has become an integral part of visual communication in our society, the student can further focus on individual photographic interests, directions, or styles (i.e. photojournalism, documentary, advertising, or commercial). *This course is being offered with the option to earn 3 college credits.* Prerequisite: Photography 3.
- \*ADVANCED PHOTOGRAPHY (Year Course, 1 Unit, Grade 12) In this advanced level course, students will continue to utilize techniques and skills acquired in Photography 3 and 4. Students will have the opportunity to explore complex photographic techniques and procedures using traditional black and white photographic equipment. Students will also have the opportunity to edit, manipulate, and create images digitally through the use of scanners, digital cameras, and photo editing software. \*Students will have the option to create an Advanced Placement portfolio with the chance to receive AP credit. Prerequisite: Photography 3 and 4.
- FASHION DESIGN (Semester Course, ½ Unit, Grades 11, 12) Using history as a guide, students will investigate how fashion has been a mirror of the times. Students will learn to design garments based on their investigations. Fabrics and textiles will also be discussed as it applies to the design of a garment. Prerequisite: Studio in Art or teacher approval
- **COLLEGE 2-D ANIMATION (Year Course, 1 Unit, Grades 11, 12)** This course offers state-of-the-art technology to beginner animators. Storytelling through drawing, narrative and development, sound, and character and scene design will be explored using a tablet and computer animation program. Students will also be introduced to the vast professional opportunities in the field of animation. This course is being offered with the option to earn 3 college credits. **Prerequisites:** Any two art courses or teacher approval.
- \*ARCHITECTURAL DESIGN (Year Course, 1 Unit, Grades 11, 12) This design course will provide an exploration of
  the fundamental elements and principles of architecture. Students will be involved in conceptual problem solving,
  extensive model building, and form/function design and layout. \*Students will have the option to create an Advanced
  Placement portfolio with the chance to receive AP credit. Prerequisite: Drawing and Painting 2 or teacher approval.

<u>PLEASE NOTE</u>: Although many of the electives are ½ year courses, it is strongly recommended that each be taken as a consecutive series in one year units (i.e. – Photography 1 and 2 with the same teacher during one academic year).



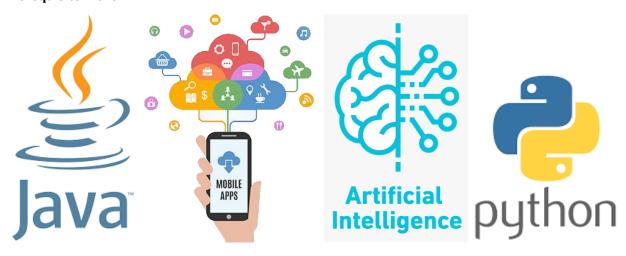
# STEAM ENGINEERING & COMPUTER SCIENCE

• STEAM Computer Science and Research - (Year Course, alternating days, ½ unit, Grade 9)

This course will engage students in a wide variety of introductory topics in the areas of digital literacy, coding, digital citizenship, cyber safety, engineering design, robotics, artificial intelligence, science research, and statistics. The overarching goal of the course is to enrich the math and science programs with fun problems and challenges that foster critical thinking, problem solving, teamwork, communication, creativity, innovation and technical skills. This course is offered to all ninth grade students, whose schedule permits, and will provide a foundation for future success in math, science, computer science and engineering electives.

# **COMPUTER SCIENCE** - Danielle Caliendo, District Chair

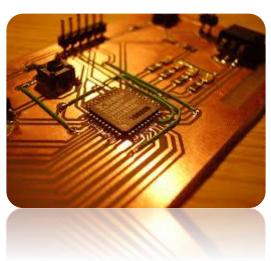
- JAVA MOBILE APPS (Year Course, 1 Unit, Grades 10, 11, 12) This course introduces the Java programming language. Students will learn to solve problems through input/output calculations, procedures, loops, parameters, and multi-dimensional arrays. This course will develop student's 21st century learning skills by combining creativity with critical thinking. Students will also be given the opportunity to create Mobile Applications using Xcode for the iPhone. By the end of the course, students will not only have the skills to build their own Mobile Apps, but will be adequately prepared to take AP Computer Science A the following year. Students may obtain college credit from NYIT. Prerequisite: None
- ADVANCED PLACEMENT COMPUTER SCIENCE A (Year Course, 1 Unit, Grades 10, 11, 12) The goals of Advanced Placement Computer Science A are comparable to those of a first-year course offered in college and university computer science departments. The major emphasis in this course is on programming methodology, algorithms, and data structures. The programming language Java constitutes the vehicle for implementing computer-based solutions to particular problems. College credit may be obtained by scoring well on the Advanced Placement Examination. Projects are integrated throughout the course. Prerequisite: Mobile Apps or departmental approval. This course may be offered as a magnet program.
- ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES (Year Course, 1 Unit, Grades 10, 11, 12) This course introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. The topics in this course will include the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. College credit may be obtained by scoring well on the Advanced Placement Examination. Prerequisite: It is expected that all students entering AP Computer Science Principles will have successfully completed Algebra 1.
- ARTIFICIAL INTELLIGENCE WITH PYTHON (Year Course, 1 Unit, Grades 11, 12) This course covers the basic principles of artificial intelligence. Students will learn basic AI techniques, the problems for which they are applicable, and their limitations. Students will use machine learning algorithms in Python to learn about AI in gaming, AI Chatbots, and other AI-related topics incorporating robots and drones. Students may obtain college credit from LIU. Prerequisite: None

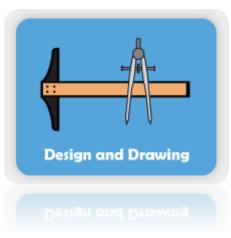


### **ENGINEERING** - Robert Soel, STEAM District Chair

- DESIGN AND DRAWING FOR PRODUCTION DDP (Year Course, 1 Unit, Grades 9, 10, 11, 12) Design and Drawing for Production is an introductory course which emphasizes critical thinking and problem solving by requiring students to examine technological solutions, learn technical drawing, explore design techniques, and become critically active in evaluating personal work and the work of others. Students will use sophisticated computer modeling and design software while developing a design proposal and making a model or prototype. This course will lay down a foundation of concepts and skills that combine the arts and sciences to foster creativity and promote innovation in today's hi-tech society. This course will prepare students for further study in our STEAM strand engineering electives, which connect science, technology, engineering, art and mathematics, as well as further study in upper level art electives. Students enrolled in DDP will also earn 1 unit of Art credit required for graduation.
- FOUNDATIONS OF ENGINEERING FOE (Year Course, 1 Unit, Grade 10) Foundations of Engineering is an introductory engineering course which takes a conceptual and mathematical look at the world of engineering. In this course, students will gain an understanding of engineering as a college major, as a career, and the role it plays in our society. Students will explore modern technological systems and engineering solutions which meet societal needs. The course will develop students' skills in teamwork, problem solving, and design. Topics include simple machines and gears, mechanical work and energy, electrical work and power, alternative energy, introduction to robotics and programming, visualization and use of computer modeling and design software. This course is project-based and will include a district final exam. Foundations of Engineering will prepare students for more advanced study in our STEAM strand engineering electives.
- COLLEGE PRINCIPLES OF ENGINEERING POE (Year Course, 1 Unit, Grades 11, 12) Principles of Engineering is a broad-based survey course that will help students explore and understand the fields of engineering and engineering technology, as well as other high-tech career possibilities. Students will expand upon the problem-solving skills gained in FOE to create solutions to engineering challenges. They will investigate various engineering systems and manufacturing processes. Also, students will learn how engineers address concerns about social and political consequences of technological change. The main purpose of this course is to experience engineering through theory and hands-on problem-solving activities. Students may obtain college credit from SUNY Farmingdale. Prerequisite: Foundations of Engineering; Co-Prerequisite: Current enrollment in Science and Math.
- **COLLEGE DIGITAL ELECTRONICS DE** (Year Course, 1 Unit, Grade 12) Digital Electronics is a course of study in applied digital logic. Students will be introduced to digital circuits found in video games, watches, calculators, digital cameras, and thousands of other devices. Students will study the application of digital logic and how digital devices are used to control automated equipment. The rapidly increasing use of digital circuitry is present in virtually all aspects of our lives. The course is similar to a first semester college course and is an important course of study for a student exploring a career in engineering or engineering technology. Students may obtain college credit from SUNY Farmingdale. **Prerequisite:** Principles of Engineering or permission of the department; **Co-Requisite:** Current enrollment in Science and Math.







Every student must complete four years of English in order to graduate. In each grade, students are expected to prepare a research project which meets the standards of the research guide developed by the district. All courses reflect the New York State Learning Standards for ELA Literacy.

In addition, a student may take elective courses in English in order to fulfill the five-unit sequence as outlined in the New York State Regents Action Plan. Electives taken in the sophomore and junior years count as electives for a 5<sup>th</sup> year sequence only, **not as a replacement** for English 4. Seniors may elect to take English 4 **and** two half-year electives in order to satisfy a 5-unit English sequence.

**AP CAPSTONE** is an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills necessary for college and beyond. AP Capstone is built on the foundation of two AP Courses offered through the English Department - **AP Seminar** and **AP Research** - and is designed to complement and enhance the in-depth, discipline-specific study experienced in other Advanced Placement courses. The AP Capstone curriculum fosters inquiry, research, collaboration, and writing skills through the intensive investigation of topics from multiple perspectives. Students likely to be successful in this program will demonstrate high levels of self-motivation, an ability to work well with peers, and exemplary time management skills.

AP Seminar is offered as an additional option for English credit in 10th grade. Students who take a two-course sequence for AP Capstone, beginning with AP Seminar in the 10th grade and continuing with AP Research in the 11th grade, are eligible to receive the *AP Seminar and Research Certificate* upon receiving a score of 3 or higher on both course assessments. Students seeking the *AP Capstone Diploma* will be required to take four additional AP courses of their choosing, in any subject area, and score a 3 or higher on each subsequent exam.

**AP SEMINAR** - AP Seminar is a critical reading and introductory research course that provides sustained practice of investigating issues from multiple perspectives and cultivates student writing abilities so they can craft, communicate, and defend evidence-based arguments. Students are empowered to collect and analyze information with accuracy and precision and are assessed through a team project and presentation, an individual written essay and presentation, and a written exam.

- Students can take AP Seminar in lieu of English 2 or English 2 Honors.
- Students are required to complete a summer assignment.

**AP RESEARCH** - In AP Research, students develop the skills and discipline necessary to conduct independent research to produce and defend a scholarly academic thesis. The course is the second in the AP Capstone series that allows students to deeply explore an academic topic, problem, or issue of individual interest, and through this inquiry, students design, plan, and conduct a year-long, research-based investigation with teacher mentoring. The course culminates in an academic thesis paper of approximately 5,000 words and a presentation, performance, or exhibition with an oral defense. **Students will take AP Research as an English elective in 11**th grade and is the second course in the AP Capstone two-course sequence.

- Prerequisite: Successful completion of AP Seminar.
- Students are required to complete a summer assignment.
- ENGLISH 1 (Year Course, 1 Unit, Grade 9) This course encompasses the study of writing, reading comprehension, literature, grammar, speaking, and listening skills with an emphasis on exposing students to a wide range of literary texts. It is tailored for students approaching or reading and writing at grade level. Successful completion of English 1 counts towards a Regents level diploma.
- **ENGLISH 1 Honors (Year Course, 1 Unit, Grade 9)** This intensive course encompasses the study of writing, reading comprehension, literature, grammar, speaking, and listening skills with an emphasis on exposing students to a wide range of highly challenging literary texts. It is tailored for students reading above grade level and who demonstrate an above-average proficiency in writing. Successful completion of English 1H counts towards a Regents level diploma.

- **ENGLISH 2 (Year Course, 1 Unit, Grade 10)** This course reinforces the skills learned in grade 9 and delves more deeply into the areas of study. It is tailored for students approaching or reading and writing at grade level. Successful completion of English 2 counts toward a Regents level diploma.
- ENGLISH 2 Honors (Year Course, 1 Unit, Grade 10) This course is a foundations course that emphasizes the necessary skills for the Advanced Placement English courses to follow. Students will be asked to consider a literary work's structure, style, argumentative strategy, and themes. English 2H is tailored for students reading above grade level and who demonstrate an above-average proficiency in writing. Successful completion of English 2H counts toward a Regents level diploma.
- AP SEMINAR AP Seminar is a critical reading and introductory research course that provides sustained practice of
  investigating issues from multiple perspectives and cultivates student writing abilities so they can craft, communicate,
  and defend evidence-based arguments. Students are empowered to collect and analyze information with accuracy and
  precision and are assessed through a team project and presentation, an individual written essay and presentation, and
  a written exam.
  - o Students can take AP Seminar in lieu of English 2 or English 2 Honors.
  - Students are required to complete a summer assignment.
- **ENGLISH 3 (Year Course, 1 Unit, Grade 11)** This course continues the development of language study, oral and written expression, and reading comprehension and analysis. Emphasis is placed on American literature and society. Students in English 3 will take the New York State Regents in English Language Arts.
- ENGLISH 3 ADVANCED PLACEMENT ENGLISH LANGUAGE (Year Course, 1 Unit, Grade 11) Advanced Placement English Language is a rhetoric course modeled after the Freshman Composition courses given at most colleges and universities. Students study works of non-fiction, including essays, speeches, and letters. They learn to analyze text and image rhetorically; they also develop techniques for synthesizing sources in their writing. The course includes the study of several classic works of American literature. Students in Advanced Placement English Language take both the New York State Regents in English Language Arts and AP exam in English Language and Composition.
- AP RESEARCH In AP Research, students develop the skills and discipline necessary to conduct independent research to produce and defend a scholarly academic thesis. The course is the second in the AP Capstone series that allows students to deeply explore an academic topic, problem, or issue of individual interest, and through this inquiry, students design, plan, and conduct a year-long, research-based investigation with teacher mentoring. The course culminates in an academic thesis paper of approximately 5,000 words and a presentation, performance, or exhibition with an oral defense. Students will take AP Research as an English elective in 11<sup>th</sup> grade and is the second course in the AP Capstone two-course sequence.
  - o Prerequisite: Successful completion of AP Seminar.
  - Students are required to complete a summer assignment.
- **ENGLISH 4 (Year Course, 1 Unit, Grade 12)** English 4 offers students a fourth year of English literature and language study. In addition to the strengthening of vocabulary, writing, speaking, and listening skills, this course prepares students for their transition to college by developing their rhetorical and literary analysis, argumentation, research, and presentation skills. The college essay, resume, and cover letter writing processes are also addressed.
- ENGLISH 4 ADVANCED PLACEMENT ENGLISH LANGUAGE (Year Course, 1 Unit, Grade 12) Students that did not take this course as juniors have the opportunity to take Advanced Placement English Language as seniors. Advanced Placement English Language is a rhetoric course, modeled after the Freshman Composition courses given at most colleges and universities. Students study works of non-fiction, including essays, speeches, and letters. They learn to analyze text and image rhetorically; they also develop techniques for synthesizing sources in their writing. The course includes the study of several classic works of American literature. Students will take the AP examination in English Language and Composition.
- ENGLISH 4 ADVANCED PLACEMENT ENGLISH LITERATURE (Year Course, 1 Unit, Grade 12) This Advanced Placement course engages students in the careful reading and critical analysis of literature. Through close reading of selected literary works, students deepen their understanding and enhance their pleasure in literature. Students study individual works, their characters, actions, structure, and language. Literary works are considered in their historical context. The course prepares students for entrance into a high-level English program in college. Students will take the AP examination in English Literature and Composition.

- **READING 9** This course is intended to provide additional support for students identified as needing remediation. It is a class offered to continue the reading support provided during middle school. Taught by a certified reading teacher, Reading 9 meets every other day in the Freshman Seminar course.
- **READING AND WRITING APPLICATIONS 1 AND 2 (Semester Course, ½ Unit, Grades 10, 11)** These courses are intended to provide additional academic support for identified students to develop the writing skills required for success on the Regents in English Language Arts examination by addressing the three tasks on the exam. Students may be required to take this course based on their final course grade in ninth or tenth grade English and upon teacher evaluation and recommendation.
- FRESHMAN SEMINAR (Year Course, Alternating Days, Grade 9) Freshman Seminar provides all ninth graders with intensive grammar, vocabulary, reading, and writing instruction. Students read, write, listen, and speak for understanding. The design of the assignments is based on the skills deemed important for ninth graders: skills which will help students succeed in all of their subjects, on the SATs, on Regents exams, in college, and beyond. The reading program Achieve3000 is incorporated into the instruction to enhance students' reading and writing skills. Students in Freshman Seminar will also have access to technology to enhance research and presentation skills.

### **ENGLISH ELECTIVES**

The English department offers a variety of courses to meet students' interests. Before requesting a course, students should read the descriptions carefully to determine which electives best meet their individual needs. A student may qualify for a 5-unit sequence as outlined by the New York State Education Department by completing four full-year courses in English and a full unit of credit in English electives. The elective program is designed to enhance and enrich sophomore, junior, and senior students' appreciation of the language arts.

- COLLEGE MEDIA (Semester Course, ½ Unit, Grades 10, 11, 12) This course involves an in-depth study of television, advertising, and film. It examines the effects of television on its viewers and helps students to recognize manipulative advertising tactics in both print and non-print media. Students also analyze film in much the same way as they would literature, discussing the director as the artistic creator. Student assignments may include analytical essays, opinion papers, and creative projects. Students are expected to research pertinent topics. Evaluation: A final project. Sophomores, juniors and seniors may earn college credit.
- *COLLEGE PUBLIC SPEAKING* (Semester Course, ½ Unit, Grades 10, 11, 12) Students enrolled in this course will examine and practice the elements of effective oral communication. Emphasis will be placed on the acquisition of effective speaking skills, using peer evaluation and critiquing as important aspects of the learning process. *Evaluation*: A final project. *Sophomores, juniors and seniors may earn college credit*.
- *CREATIVE WRITING 1* (Semester Course, ½ Unit, Grades 10, 11, 12) This course in creative writing develops students' abilities in self-expression. Students learn to analyze works of literature to emulate useful techniques and to establish individual styles. Students write frequently and engage in peer evaluation of the creative writing process. Evaluation: A final project. *Sophomores, juniors, and seniors may earn college credit.*
- CREATIVE WRITING 2: NON-FICTION (Semester Course, ½ Unit, Grades 10, 11, 12) This course in Creative Writing differs from Creative Writing 1 by the incorporation of the self into the writing. Students in this course represent themselves on the page through their observations, reflections, and revelations. Readings by various authors help students define non-fiction writing categories, investigate rhetorical approaches, and identify literary features that non-fiction writers use to merge form with content. Students write regularly and engage in peer evaluation to develop a portfolio of original non-fiction prose. Evaluation: A final project.



- COLLEGE JOURNALISM (Semester Course, ½ Unit, Grades 10, 11, 12) This course focuses on developing students' abilities in writing, research and reporting. Students read and evaluate writings of major figures in news articles, features, sports, columns, and editorials. Students will engage in layout and design activities, using programs such as InDesign and Photoshop. Sophomores, juniors and seniors may earn college credit. Evaluation: A final project.
- PATHWAYS: FINDING AND FULFILLING YOUR PASSION (Semester Course, ½ Unit, Grades 10, 11) This self-guided course is designed to help students to identify their passions and to guide them through the exploration of how to pursue a life that includes application of those passions. In addition to discovering their natural talents and personal affinities, students will engage in independent research and be exposed to career opportunities not typically in their field of vision. Students will develop vital 21st Century skills such as long-term and short-term goal setting, presentation literacy, and effective communication. This course enables students to drive the trajectory of their exploration and learning in order to develop multiple pathways that will help them establish and achieve their goals.
- SAT/ACT STRATEGIES (Semester Course, ½ Unit, Grade 11) This course will focus on the verbal skills essential for success on the SAT and ACT exams, with the ultimate goal of preparing students for the rigors of college-level reading and writing expectations. It is also designed to enhance the literacy skills of college-bound students through the development of critical reading, speed reading, and time management techniques.
- COLLEGE SOCIAL MEDIA AND BLOGGING (Semester Course, ½ Unit, Grades 10, 11, 12) This course is designed for students who have an interest in using social media resources as a way to promote a passion, skill, talent, or business plan. Students will experiment with various social media platforms and applications in a safe environment while learning about digital citizenship, media analysis, and laws/ethics. Students will engage in written communication including blog posts, captions, and hashtags, explore visual communication through photographs, product placement, and layout, and hone verbal communication through presentations, speeches, debates, and vlogs. Sophomores, juniors, and seniors may earn college credit. Evaluation: A final project.
- STRANGER FICTION (Semester Course, ½ Unit, Grades 10, 11, 12) The course will explore science fiction as a genre that answers the overarching question, "What does it mean to be human?" Course material will include stories of ancient beasts, heroes and gods, aliens, time travel, robots, the supernatural, horror, fantasy, alternative realities and re-animation. By contrasting humans with something beyond the realm of normal human experience, through the use of advanced technology or otherwise, the genre attempts to define the human experience. Literature, films, and television shows are examined through lenses of cultural, national and scientific perspectives. Some concepts of psychology, anthropology, physics, biology, chemistry and earth science are relevantly discussed.
- THEATRE ARTS 1 (Semester Course, ½ Unit, Grades, 10, 11, 12) This introduction to the theatre will survey a broad range of topics. Included are improvisation, pantomime, voice and diction, acting, scene study, theater history, principles of set, light, costume design and make-up, elements of criticism, play production, and oral interpretation. Active participation in school productions is expected.
- THEATRE ARTS 2 (Semester Course, ½ Unit, Grades, 10, 11, 12) This sequel to Theatre Arts 1 will supplement the foundation established in that class. In addition to reinforcement of all topics introduced in Theatre Arts 1, dramatic literature and the principles of acting will be introduced. Active participation in school productions is expected. Theatre Arts 1 is recommended, though not required for Theatre Arts 2.
- VOICES FROM THE PAST: A STUDY OF GENOCIDE IN HISTORY (Year Course, ½ Unit English, ½ Unit Social Studies, Grades 10, 11, 12) This interdisciplinary course will focus on the Holocaust and other past and present examples of genocide. Students will use literature, first person narratives, and historical accounts in order to understand the causes of genocide, the rise of hate crimes, and most importantly, ways to prevent "man's inhumanity to man" now and in the future. Students will develop an understanding of the roles and responsibilities of individuals, organizations and governments. This one-period, yearlong course is a Social Studies and English elective and is open to students in 10th, 11th and 12th grades. This course is also listed under Social Studies. Sophomores, juniors, and seniors may earn college credit. Evaluation: A final project.

- **DRAMA 1: INTRODUCTION TO THEATRE (Year Couse, 1 Unit, Grade 9)** This course is an introduction to all aspects of theatre, including theatre history, basic performance skills, technical theatre, basic production skills, and literary analysis. **(Calhoun HS Only)**
- DRAMA 2: THE ACTOR AND THE DRAMA (Year Course, 1 Unit, Grade 10) The primary focus is on developing skills and techniques of the actor and the playwright. Other technical areas are also examined. Investigations into literature and theatre history are ongoing, and continue through 11th and 12th grade as well. (Calhoun HS Only)
- DRAMA 3/4: ADVANCED THEARTRE SEMINAR (Year Course, 1 Unit, Grades 11, 12) The concentration in the junior and senior years is on portfolio development as actors, writers, or technicians. Curriculum is seminar style and uses a series of rotation components over the two years. Emphasis is on acting styles in the 11<sup>th</sup> grade and basic directing skills in the 12<sup>th</sup> grade. Juniors and seniors may earn college credit. (Calhoun HS Only)

\*Students accepted into the Drama program will begin as ninth graders and should plan to spend four years as full time students at Calhoun High School. An audition/interview workshop and middle school experience are reviewed in determining acceptance into the program. If space is available, tenth graders may enter the program with strong evidence of prior participation and demonstrated ability in drama.









# **HEALTH** - Eric Caballero, Director

The Health education curriculum exposes our students to key concepts on how to properly maintain and promote a healthy lifestyle in a consistently changing environment. Throughout the curriculum, there is a theme of developing positive behaviors to enhance a healthier, more productive member of society. In addition, emphasis is placed on eliminating behaviors that negatively affect a healthy lifestyle and place an individual at risk. The instructional units are organized into major topical groupings that build a broad foundation of information, while also educating students of opportunities to gather information and promote healthy decision making within the community.

In order to graduate, every student must successfully complete a state-approved health education course in senior high school.

• **HEALTH** - (Semester Course, ½ Unit) – The health education course enables a student to maintain and promote a healthy lifestyle in a continually changing environment. Throughout the course, there is a theme of developing positive behaviors to enhance a person's life and lifestyle, as well as to encourage the student to become a more productive member of society. In addition, emphasis is given to eliminate behaviors that negatively affect a healthy lifestyle and place an individual at risk.

The instructional units are organized into major topical groupings that allow the teacher to build a broad foundation while explaining and challenging the student with new information and problems to solve. The basic grouping includes:

- o Alcohol, tobacco, and other drug substances
- o Diseases and disorders
- o Emotional health
- Human growth and development
- o Family life education
- Nutrition
- Violence Prevention
- **WOMEN'S HEALTH** (Semester Course, ½ Unit) This course will be designed to enable young women to explore issues related to their gender in a safe, non-threatening environment. The course will provide information and handson learning that will support women's health.
- NAVIGATING THROUGH LIFE Health Elective (½ unit) \*Calhoun Only This course encourages students to actively participate in preparing for life skills that will enable them to become self-advocates when dealing with future challenges, social situations, financial literacy and real life experiences as they matriculate to college/universities or the workforce. The instructional topics are organized in topical groupings that allow the teacher to build a broad foundation while explaining and challenging the student with new information and problem solving techniques. The basic groupings include but are not limited to topics such as, financial literacy, digital citizenship, culinary skills, household maintenance and stress management. This is a health elective that is taken after the NYS mandated course is completed.



# MATHEMATICS - Danielle Caliendo, Ronald Giarraffa, David Prince District Chairs

The mathematics curriculum offers more students the opportunity to learn more mathematics than ever before. All courses and levels of study help students to develop conceptual understanding, build strong problem-solving skills, and learn to apply critical and creative thinking skills to real-world challenges and problems. Regents level courses, extended math programs, and accelerated programs are offered, as well as enrichment and advanced placement courses.

- *ALGEBRA* (Year Course, 1 Unit, Grade 9) This course will foster a deeper understanding of algebraic ideas. Topics include properties of operations, functions, systems of linear equations and inequalities, factoring techniques, quadratic functions, transformations of functions, and statistics. All students will take a district final exam in June.
- *ALGEBRA 1\** (Year Course, 1 Unit, Grade 9, 10) The fundamental purpose of this course is to deepen and extend understanding of linear, quadratic, and exponential relationships. Students will analyze and explain the process of solving equations and inequalities; analyze, solve, and use quadratic functions to solve problems; learn regression techniques to describe linear and exponential relationships between quantities. Students expand upon functions such as absolute value, step, and those that are piecewise defined. They will select from among these functions to model phenomena using the modeling cycle. All students will take a Regents exam in June.
- APPLIED GEOMETRY (Year Course, 1 Unit, Grade 10, 11 12) In this course students discover, learn, and apply the basics of geometry by using a discovery approach to identify the properties of geometry by observing, investigating, and forming their own conclusions. Topics include inductive reasoning, angles, triangles, quadrilaterals, circles, coordinate geometry, perimeter, area, volume, transformations, congruence, similarity, and trigonometric relationships. The students will expand upon their Algebra 1 skills while learning to appreciate how often geometry is used in ways that relate directly to everyday life. This course ends in a final exam. Pre-requisite: Successful completion of Algebra 1.
- GEOMETRY with Lab\*, GEOMETRY, GEOMETRY H (Year Course, 1 Unit, Grades 9, 10) In this course students will explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. They will establish triangle congruence criteria based on analyses of rigid motion and formal constructions, prove theorems, and solve problems about triangles, quadrilaterals, and other polygons. Students' experience with two-dimensional and three-dimensional objects is extended to include informal explanations of circumference, area, and volume formulas. Students will also prove basic theorems about circles and use a rectangular coordinate system to verify geometric relationships. All students will take a Regents exam in June.
- **INTERMEDIATE MATH TOPICS (Year Course, 1 Unit, Grades 11, 12)** This is an advanced algebra course that expands on the topics of Algebra 1 and provides further development of the concept of a function. The expanded topics of the course include polynomials and polynomial functions, rational exponents, the complex numbers, probability and statistics, trigonometry, and exponential and logarithmic functions. All students will take a district final exam in June.
- ALGEBRA 2 with Lab\*, ALGEBRA 2, ALGEBRA 2H (Year Course, 1 Unit, Grades 10, 11) Building on work with linear, quadratic, and exponential functions from Algebra 1, 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. Building on previous work with trigonometric rations and circles in Geometry, students extend trigonometric functions to all (or most) real numbers and begin building fluency with the values of sine, cosine, and tangent using the unit circle. Students will also compute and interpret probabilities for compound events, attending to mutually exclusive events, independent events, and conditional probability. All students will take a Regents exam in June.

\*A math lab is offered in conjunction with a student's math class, giving him or her an extra period of math on alternate days.

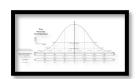
# MATHEMATICS - Danielle Caliendo, Ronald Giarraffa, David Prince District Chairs

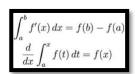
- STATISTICS (Year Course, 1 Unit, Grade 10, 11, 12) This course is a practical hands-on approach to the study of statistics and probability utilizing project-based learning. It will provide students with an introduction to statistics by focusing on data collection and analysis including topics such as sampling, surveys, experimental design, organizing data, distributions, regression, probability, and inference. Students will see how fields outside of mathematics use statistics to analyze and interpret data to make informed decisions. Simulations and activities are designed to aid students' understanding of real-world phenomena. With the assistance of technology, they will apply the concepts in a myriad of ways to critically analyze and synthesize information. Pre-requisite: Successful completion of two years of high school level math.
- **CONTEMPORARY MATH (Year Course, 1 Unit, Grades 11, 12)** This course is recommended for students who need a third year of math to complete the State requirement. This course is designed to give students a firm problem-solving foundation that can be utilized in the study of higher mathematics and real life situations. Students will be exposed to numerous problem-solving strategies, and these techniques will be applied to topics such as intermediate algebra, geometry, trigonometry, matrices, logic, probability, statistics, functions, business applications, and SAT questions. **Prerequisite:** Two years of math and successful completion of the Algebra 1 Regents.
- SAT/ACT STRATEGIES (Semester Course, ½ Unit, Grade 11) This course will focus on the math skills essential for success on the SAT and ACT exams, with the ultimate goal of preparing students for the rigors of college-level mathematics. It is also designed to enhance the problem-solving, critical thinking, and reasoning skills of college-bound students.
- *COLLEGE PRE-CALCULUS HONORS* (Year Course, 1 Unit, Grade 11) This fourth-year math course is an accelerated math course dealing with various topics from advanced algebra, analytic geometry, and introductory calculus. These topics are essential to establishing an adequate background for the study of higher mathematics. A district final examination is given at the conclusion of the course. **Prerequisite:** Algebra 2A and successful completion of Algebra 2 Regents exam. This course is offered for college credit.
- **COLLEGE PRE-CALCULUS (Year Course, 1 Unit, Grades 11, 12)** This is a fourth-year math course designed to provide a firm foundation for college mathematics. Topics include work with the theory of equations, complex numbers, polar graphing, analytic geometry, and an intuitive introduction to differential calculus using algebraic functions. A district final exam is given at the conclusion of the course. **Prerequisite:** Algebra 2. This course is offered for college credit.
- CALCULUS HONORS (Year Course, 1 Unit, Grade 12) This course is recommended for students who have completed their junior year at the enriched level, but desire a calculus experience less demanding than Advanced Placement Calculus. This course covers most of the AP Calculus topics in a less rigorous, slower-paced manner. A district final exam is given at the conclusion of the course. Prerequisite: College Pre-Calculus or College Pre-Calculus Honors.
- COLLEGE FINITE MATHEMATICS THROUGH APPLICATIONS (Year Course, 1 Unit, Grade 12) Students taking this course that plan on majoring in Liberal Arts in college may be able to earn college credits through St. John's University. This college-level course provides a quantitative approach to an understanding and interpretation of mathematics in the liberal arts fields. The course will provide a foundation for practical decision making through a discussion of topics from finite and discrete mathematics. Topics include decision theory, matrix operations and applications, game theory, linear programming, graph theory, counting, probability, and recursion techniques. There is a mid-year and an end-of-year final examination. Prerequisite: Three years of math and the successful completion of the Algebra 2 Regents.

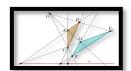
# MATHEMATICS - Danielle Caliendo, Ronald Giarraffa, David Prince District Chairs

- ADVANCED PLACEMENT STATISTICS (Year Course, 1 Unit, Grades 10, 11, 12) This course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The course content is based on that of a typical one-semester introductory college course in statistics. Topics include data description, probability concepts, and estimation procedures, statistical hypothesis testing, correlation and regression analysis. Emphasis is placed on planning and conducting statistical experiments. This course is suitable for students interested in the social sciences, health science, or business administration. It is also an effective preparation for the upper-level calculus-based statistics course often taken by math, science, and engineering majors. College credit may be obtained by scoring well on the AP exam. Prerequisite: Algebra 2. Students may take this course concurrently with Algebra 2, subject to departmental approval.
- ADVANCED PLACEMENT CALCULUS AB (Year Course, 1 Unit, Grade 12) This course is equivalent to a first-year college calculus course. Topics include the study of limits, the derivative as a rate of change, applications of differentiation, integrals as net rate of change, and applications of integration. It is assumed that all students will take the AP exam at the end of this course. College credit may be obtained by scoring well on the AP exam. Prerequisite: Algebra 2A, College Pre-Calculus Honors. (Possible interviews by course teacher, counselor, chairperson, or principal.)
- ADVANCED PLACEMENT CALCULUS BC\* (Year Course, 1 ½ Units, Grade 12) Calculus BC is a course in single-variable calculus that includes all the topics of Calculus AB (techniques and applications of the derivative, techniques and applications of the definite integral, and the Fundamental Theorem of Calculus) plus additional topics in differential and integral calculus (including parametric, polar, and vector functions) and series. It is equivalent to at least a year of calculus at most colleges and universities. Algebraic, numerical, and graphical representations are emphasized throughout the course. College credit may be obtained by scoring well on the AP exam. Prerequisites: Algebra 2A, College Pre-Calculus Honors. (Possible interviews by course teacher, counselor, chairperson, or principal.) \*This course includes an additional period of instruction on alternating days.









# MUSIC - Cheryl Fontana, Director

The music curriculum, both instrumental and vocal, provides extensive study and experience in the academic and applied aspects of music. Students who consider music fun and culturally important, or students who want music education to fulfill a career need will have courses to satisfy either intensity. Students in performing groups <u>are required</u> to attend all performances of their group. Additionally, as part of the course requirement, **our performance ensembles require rotating out of another class for additional sectional instruction.** <u>NOTE:</u> Students using district instruments will be required to pay a maintenance charge. (*All students must have 1 unit of art or music in order to graduate.*)

- **CONCERT ORCHESTRA (Year Course, 1 Unit, Grades 9, 10, 11, 12)** Orchestra is made up of predominantly 9<sup>th</sup> grade students wishing to continue on with their instrument in high school. Designed specifically for string players (violin, viola, cello, and string bass), the topics covered include bow control, playing in positions, intonation, rhythms, and interpretation. **Prerequisite:** Middle School orchestra experience or audition.
- **SYMPHONY ORCHESTRA** (Year Course, 1 Unit, Grades 10, 11, 12) This course is designed for upper level string players and works to enhance the skills & musicality covered in Orchestra class. Although class lessons are strings only, these players may be combined with winds and percussion to form a full orchestra for some concerts. **Prerequisite:** Orchestra or audition/teacher approval.
- **CONCERT BAND** (Year Course, 1 Unit, Grades 9, 10, 11, 12) This group is made up principally of 9th graders who choose to perform in the instrumental program. It is a concert band which performs separately for school and community groups. The basic musical skills of rhythm, tone production, intonation, technique, and interpretation are covered. Members of this group may also be required to perform in the Pep Band. There is a playing final. **Prerequisite:** Middle School band experience or audition.
- **SYMPHONIC BAND (Year Course, 1 Unit, Grades 10, 11, 12)** This band studies and plays sophisticated music in the band literature. Its performances are noteworthy in terms of technique, intonation, balance, interpretation, and tone quality. Public performances have included school and community concerts, football games, parades, and graduation exercises. Talented students have been provided with opportunities to conduct at various school performances. There is a final exam that is primarily playing. **Prerequisite:** May require audition and teacher approval.
- **WIND ENSEMBLE** (Year Course, 1 Unit, Grades 10, 11, 12) The Wind Ensemble is a select group of predominately eleventh and twelfth graders who play sophisticated music in band and wind ensemble literature. Advanced technical skills, tone production, rhythms, and mature stylistic interpretation are covered. There is a playing final. **Prerequisite:** Audition and teacher approval.
- *MIXED CHORUS* (Year Course, 1 Unit, Grades 9, 10, 11, 12) This course involves singing music of all styles. The techniques of diction, pitch interpretation, and tone production are taught. Public and school performances are required. **Prerequisite:** May require audition and teacher approval.
- **CONCERT CHOIR (Year Course, 1 Unit, Grades 10, 11, 12)** This is an advanced course in choral singing of all kinds. Advanced sight reading, musical styles, and advanced vocal techniques are included. Public performances include school concerts, sporting events, various community events, and even local and national competitions games. **Prerequisite:** Audition or teacher approval.
- **GUITAR 1: FOUNDATIONS (Year Course, 1 Unit, Grades 10, 11, 12)** This course is designed to teach students the fundamentals of guitar. In conjunction with learning how to play, students will also learn how to read music and chord charts through popular songs, etc. This course will be project-based in which students participate in fun, challenging, and creative assignments in both groups and as individuals. Learn your favorite music; all styles welcome. No prior music experience is necessary. **Maintenance Fee:** \$30.00 for all students who use provided guitars.
- GUITAR 2: ADVANCED TECHNIQUES (SONGWRITING/ARRANGING) (Year Course, 1 Unit, Grades 11, 12) Advanced Techniques (Songwriting/Arranging) will explore the area of basic composition and arranging through advanced techniques on the guitar. Some topics covered will include, but will not be limited to improvisation, how songs are constructed, analyzing songs, recording, making music your own, and writing original compositions. Prerequisite: Guitar 1 or permission from instructor. Maintenance Fee: \$30.00 for all students who use provided guitars.

# MUSIC - Cheryl Fontana, Director

- COLLEGE MUSIC THEORY (Year Course, 1 Unit, Grades 11, 12) This course forms a foundation of knowledge and skill in music that is valuable to the vocalist, instrumentalist, or song writer. Ear training, rhythmic and melodic dictation, sight singing, composition, and basic analysis are provided to students in this traditional music theory course. Music is examined through the study of harmonic techniques from the past and present. This course is being offered to earn 3 college credits. Prerequisite: 2 consecutive years of any high school level music course or permission from department.
- ROCK ENSEMBLE (A.M.P. American Music Performers) (Year Course, 1 Unit, Grades 10, 11, 12) Modeled after traditional Rock Bands, students will learn what it is like to be a modern day rock musician providing opportunities to grow/develop their skills in song selection, arranging, performance, audio/sound set up & execution, etc. Participants in this class will learn intermediate and advanced performance techniques focused on the modern ensembles of today (rock, hip-hop, pop, country, folk, singer/songwriter) through their work on one of the following instruments: guitar, piano, bass, drums. The course provides opportunities for all musicians to expand their skill while also serving as a continuum of learning for our guitar students. As with all performance ensembles, students will be required to participate in designated performances as well as complete mandatory rotating sectional lessons. Prerequisite Audition and/or teacher recommendation \* \*Important Vocalists may audition but will be required to also declare an instrument of focus.



### **BUSINESS EDUCATION -**

# Theresa Dell'Olio, Mark Melkonian, Jeffrey Cronk, Department Supervisors

Business/Marketing courses equip students with a variety of job competencies that are essential in today's competitive employment market and provide students an opportunity to explore college majors. These courses also seek to develop understanding and skills that enable students to enter the business world while assisting students in the management of their personal affairs. The courses in this section may be used as electives for any student. Some of the courses provide an opportunity for college credit.

- **COLLEGE MARKETING 1 (Year Course, 1 Unit, Grades 10, 11, 12)** In this course, students will explore the psychology of promoting and selling goods and services, learn how stores reach customers, and develop marketing strategies that appeal to target markets. Students will analyze product development, pricing, promotional, and selling strategies while evaluating advertisements, new products, and marketing campaigns. Using a project-oriented approach, the students will analyze both business and personal goals as a means of achieving career success. This course may be offered for college credit.
- MARKETING 2: ENTREPRENEURSHIP (Semester Course, 1/2 Unit, Grades 10,11,12) How would you like to start your own online business? Entrepreneurship focuses on developing a business plan that will get you started on the road to success. Students will be exposed to critical thinking, problem solving, and innovation in this course as they will either be the business owner or the individual working in a competitive job market in the future. Guest speakers from various businesses will present and there will be field trips to enhance the classroom experience. There will be an integration of accounting, finance, marketing, and management though projects. Students will demonstrate their learning through exploration, interpretation, and application of their team's business ideas.
- **COLLEGE ACCOUNTING (Year Course, 1 Unit, Grades 10, 11, 12)** This course is designed to develop occupational competencies in accounting. It is highly recommended for students going on to post-secondary accounting training and for students who plan to major in any business area. Course content encompasses the complete accounting cycle and is applicable to any future career path. Both manual and computerized procedures are covered. This course can also be offered for college credit.
- COLLEGE BUSINESS & PERSONAL LAW (Year Course, 1 Unit, Grades 10, 11, 12) This course is highly recommended for all students. Emphasis is placed on individuals as they encounter business law in their personal, family, and occupational lives. Students are offered insights into the intelligent application of the law as it affects them both at home and at work. Both the civil and criminal systems of the law are presented. The topics covered include the origins of our legal system, torts, contracts, the rights and obligations of citizens, student rights, bailments, real estate, insurance, the legal environment, employment relationships, the law of sales, banking, wills, agency relationships, and business ownerships. The course may also be offered for college credit.
- CAREER & FINANCIAL MANAGEMENT (Semester Course, ½ Unit, Grades 10, 11, 12) This is a half-year course designed to develop the essential basic competencies required for career preparation and managing one's personal financial affairs. All students are encouraged to take this highly practical and useful course. Areas covered will include insights into wise application of consumer purchasing, saving, organizing and managing financial documents, and investments. Possible topics include budgeting, banking, comparison shopping, stocks and bonds, mutual funds, buying a car, real estate, buying a house, career research, and insurance protection. Many hands-on computerized applications and practical real life simulation projects will be utilized to teach this course.
- SPORTS & ENTERTAINMENT MARKETING (Semester Course, ½ Unit, Grades 10, 11, 12) Instruction will include an introduction to basic marketing concepts associated with sports, music, television, radio, and film. Students will examine current domestic and international trends in the sports and entertainment industries as they pertain to merchandising, technology, demographics, and market research. Through group projects and case studies, students will experience product development, logos, event planning, promotion, and public relations.



# **BUSINESS EDUCATION -**

# Theresa Dell'Olio, Mark Melkonian, Jeffrey Cronk, Department Supervisors

- FASHION MARKETING (Semester Course, 1/2 Unit, Grades 10, 11, 12) This course is designed for students to gain basic knowledge of the fashion industry. Fashion marketing focuses on how basic marketing principles apply to a range of activities from textile and apparel production to methods of distribution and promotion of fashion merchandise. These skills will build on a foundation of critical thinking and problem solving skills. Students learn that success in the fashion world, as in career field, also requires key workplace competencies, such as responsibility, self-management, leadership, and integrity.
- HOSPITALITY AND MANAGEMENT (H.A.M.) (Year Course, 1 Unit, Grades 11, 12) This introductory course covers management principles pertaining to human resources, individual behavior in organizations, employee motivation and performance, and business ethics within the Culinary & Hospitality Industry. Topics also include managing and the manager's job, planning and decision making, employee performance appraisal and feedback, leadership and influence processes, interpersonal relations and communication, and managing work groups and teams. This course may be offered for college credit.
- VIRTUAL ENTERPRISE (Year Course, 2 Units, Grade 12) The Virtual Enterprise (VE) is a simulated business managed by students under the guidance of a teacher facilitator and a business partner. With emphasis on college and career readiness, VEI offers students a competitive edge through project-based, collaborative learning and the development of 21st Century skills in entrepreneurship, global awareness, problem solving, communication, financial literacy and technology. VEI is part of an international network of simulated businesses (practice firms) in which students trade with others from around the world, thus exposing them to different cultures and the global marketplace. For a more detailed program description, go to <a href="https://www.veinternational.org">www.veinternational.org</a>. The Virtual Enterprise is a one-year, 90-minute class that provides students with an opportunity to earn 6 college credits with SUNY Farmingdale.
- **FUTURE BUSINESS LEADERS OF AMERICA FBLA** Future Business Leaders of America is a co-curricular activity. The Future Business Leaders of America-Phi-Beta-Lambda is a nationwide organization designed to allow students to bridge the gap between what they learn in school and the business world. It develops leadership qualities, promotes community service, encourages academic achievement, and offers numerous growth opportunities to members. FBLA goals include:
  - Developing competent, aggressive business leadership
  - > Strengthening the confidence of students in themselves and their work
  - Creating more interest in and understanding of American business enterprise
  - > Encouraging members in the development on individual projects which contributes to the improvement of homes, businesses, and the community
  - > Developing character, preparing for useful citizenship, and fostering patriotism
  - > Encouraging scholarship and promoting school loyalty
  - > Assisting students in the establishment of occupational goals
  - > Facilitating the transition from school to work

Individual chapters' activities vary widely, but almost all chapters participate in community service, school service, fundraising, social activities, promotion of FBLA, and conference attendance. Students will also get an opportunity to compete on regional, state, and national levels. Of course, not all members can participate in every activity. They can choose their own level of involvement based on their schedules, but the more active members are the greater benefit they receive.

• **DISTRIBUTIVE EDUCATION CLUB OF AMERICA - DECA** - Distributive Education Club of America is a national association of marketing students that encourages student leadership, career awareness, and civic consciousness. DECA works with the business community to integrate academic achievements with career and technical skills. It is a cocurricular activity for students enrolled in our marketing classes.

# **BUSINESS EDUCATION** -

# Theresa Dell'Olio, Mark Melkonian, Jeffrey Cronk, Department Supervisors

- COLLEGE FINANCE AND WALL STREET 101 (Semester Course) Do you want to learn why people say, "start investing now" an what it means to, "pay yourself first"? Well then this course is for you! Finance and Wall Street is an introduction to the Stock Market and the world of investing. This is an exciting course that allows the student to develop a foundation of investing and financial planning skills. Throughout this course, students will have the opportunity to manage their own stock portfolio and analyze financial data, while learning about the power of compound interest. Other topics that will be covered include investment strategies, mutual funds, retirement options, financial ratios, the time value of money, and the 2008 Financial Crisis. This is a semester course.
- **DIGITAL LITERACY IN THE 21**<sup>ST</sup> **CENTURY (Semester Course)** Do you ever feel like you don't know how to navigate the Google Suite? Ever get stuck on how to properly use Google Sheets or how to draft a professional email? Well, look no further! This class is designed to develop the skills students need to effectively integrate technology into their educational and eventually professional practices. By properly learning how to navigate the Google Suite and other applications like Canva, the students will learn basic digital skills that are needed to be productive citizens in the 21<sup>st</sup> century workforce. Some additional topics that will be explored during this course include identifying basic system maintenance operations for hardware and software; using a web browser to navigate documents, download files, and use search engines; identifying ethical and unethical uses of computers and information; and demonstrating a basic understanding of issues like computer viruses and ways to protect themselves from phishing, fraud, etc. This is a semester course.



# FAMILY AND CONSUMER SCIENCES - Jeffrey Cronk, Department Supervisor

- FOOD AND NUTRITION (Semester Course, ½ Unit, Grades 10, 11, 12) The content of the course includes nutrition awareness, meal management, food purchasing, food production, and meal preparation. The under-lying theme of the course will be on principles of proper nutrition and meal habits. Students will become familiar with vegetable and fruit cookery, pasta and rice cookery, and the basic preparation and cooking methods of meats and seafood. This course concludes with a research project and a final exam.
- *GOURMET FOODS* (Semester Course, ½ Unit, Grades 10, 11, 12) Gourmet Foods is a course designed for students who are interested in expressing themselves through the art of cooking. In one semester, students are introduced to the theory and practical application of how to operate a hands-on kitchen. Topics such as safety sanitation and proper knife skills will be a constant focus in classroom labs. The underlying theme of the course will be on the principles of culinary arts, food science, and cultural cuisine. This course concludes with a research project and a final exam.
- FARM TO TABLE (Semester Course, 1/2 Unit, Grades 10, 11, 12) This course focuses on the state of local growing and the process of how food systems work. Students will get the opportunity to see how local foods are incorporated into our diet and how seasonally sourced foods are important to taste, flavor, and the economy. It emphasizes the importance of sustainability at the local level and its impact on the global world. Topics include gardening, growing herbs, food preservation, seasonally driven menus and food sourcing, but students will not be cooking in this course. This course concludes with a research project and final exam.
- **HUMAN DEVELOPMENT** (Semester Course, ½ Unit, Grades 10, 11, 12) The content of this course focuses on the life, development of a human, and how he/she relates to others (i.e. peers, young children, and adults). This course concludes with a final exam.
- CHILD DEVELOPMENT (Semester Course, ½ Unit, Grades 10, 11, 12) This course provides study of the physical, emotional, intellectual, and social development of the infant, toddler, and preschooler. Daily routine, guidance, discipline, and other parenting skills will be explored. This course concludes with a final exam.
- COLOR FOR FASHION, TEXTILES AND HOME FURNISHINGS (Semester Course, 1/2 Unit, Grades 10, 11, 12) This course will familiarize students with color and textiles and how they apply to fashion and home furnishings. It focuses on light and color, color systems, schemes, as well as pattern design for textiles and the psychological impact of color. Students will explore fabrics, the history of fashion and trends, garment parts and styles as well as the elements and principles of design for both fashion and home furnishings. This course concludes with a research project and final exam.





# PHYSICAL EDUCATION - Eric Caballero, Director

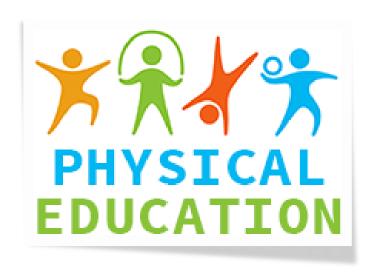
The high school Physical Education program has, as its foundation, a common core of sequential learning experiences that are geared to the developmental needs of each student. As a focal point, all activities are designed to enrich physical fitness of students by providing knowledge and experience that enhance overall personal health. The high school program focuses on developing skills within lifetime fitness, team sports, and recreational pursuits while also informing students of opportunities to pursue physical activities within the community.

If a student has a physical disability which prevents taking part in a regular gym activity program, either on a temporary or permanent basis, that student will enroll in the Physical Education Adaptive program as scheduling permits.

In keeping with State and Federal regulations, girls and boys share all appropriate activities.

Students must earn  $\frac{1}{2}$  credit in Physical Education each year in grades 9 – 12, for a total of 2 units of credit, in order to be eligible to receive a diploma.

- TRADITIONAL TEAM SPORTS (Year Course, ½ Unit, 10-12 Section) This course will develop the motor skills, content knowledge, and pedagogic techniques required for successful participation in a multitude of team sports which include, but are not limited to, Basketball, Football, Softball, Team Handball, and Floor Hockey. In addition, camaraderie, competitiveness, and appropriate sportsmanship skills will be emphasized throughout the class in a safe and productive environment.
- INDIVIDUAL SPORTS & LIFELONG FITNESS/RECREATIONAL PURSUITS (Year Course, ½ Unit, 10-12 Section) This course will teach the general principles and techniques required for successful participation in a multitude of individual and partner sports and activities that the students can take with them throughout life. Activities include, but are not limited to, Net Sports, Archery, Golf, Ultimate Frisbee, and Spike Ball. In addition, this course will also include a series of units that are designed to explore current fitness plans that are available in the contemporary fitness world. Students will focus on improving overall fitness through activities that will develop strength, endurance, and flexibility.
- 9th GRADE GENERAL PHYSICAL EDUCATION (Year Course, ½ Unit, 9th grade ONLY Section) The 9th grade Physical Education program consists of co-ed physical education classes designed to provide a broad foundation of personal health and fitness, recreational activities, and team and individual sports. As a result, students learn the requisite skills necessary to be successful in various sports and further stimulate an interest in recreational activities in a safe environment.



### **SCIENCE** – Heather Bizewski, Nicole Rhodes, Robert Soel, District Chairs

The Science Department offers courses designed for a full range of interests and abilities. Advanced Placement courses permit college-level, in-depth study of a single discipline, while elective courses present a broad interdisciplinary survey.

- EARTH AND SPACE SCIENCE (Year Course, 1 Unit, Grades 10, 11, 12 9 Periods/cycle) This course invites students to explore the universe and its stars, travel back through the history of the Earth, examine interactions between materials and Earth's systems, identify climate patterns, determine factors that impact weather and climate and develop solutions for global concerns. Students will apply modeling, engineering design, and problem-solving techniques to reinforce their understanding of Earth and space systems. Successful completion of NYS Required Investigations (1200 minutes) and laboratory activities are required for admission to the Earth & Space Science Regents exam. The three mandatory investigations titles include "Sky is the Limit", "The Ripple Effect," and "Unearthing Mars." All students take the Earth & Space Science Regents exam at the conclusion of course.
- *BIOLOGY R* (Year Course, 1 Unit, Grades 9, 10, 11, 12 9 Periods/cycle) This course provides students with an understanding of the fundamental principles of biology as outlined by the New York Science Standards. The standards include structure and function, matter and energy in organisms and ecosystems, interdependent relationships in ecosystems, inheritance and variation of traits, natural selection and evolution, earth's systems, and engineering design. Successful completion of NYS Required Investigations (1200 minutes) and laboratory activities are required for admission to the Biology Regents exam. The three mandatory investigations titles include "Balancing Act", "Lactose Tolerance", and "For the Birds". All students take the Biology Regents exam at the conclusion of the course.
- BIOLOGY H (Year Course, 1 Unit, Grade 9 9 Periods/cycle) This course provides students with an understanding of the fundamental principles of biology as outlined by the New York Science Standards. The standards include structure and function, matter and energy in organisms and ecosystems, interdependent relationships in ecosystems, inheritance and variation of traits, natural selection and evolution, earth's systems, and engineering design. As an honors class, various topics are covered at greater depth to prepare students for upper-level AP science classes. Successful completion of NYS Required Investigations (1200 minutes) and laboratory activities are required for admission to the Biology Regents exam. The three mandatory investigations titles include "Balancing Act", "Lactose Tolerance", and "For the Birds". All students take the Biology Regents exam at the conclusion of the course. Prerequisite: Students must have successfully completed Earth Science A/ Earth and Space Science and the corresponding Regents examination.
- **PHYSICAL SETTING: CHEMISTRY R** (Year Course, 1 Unit, Grades 10, 11, 12 9 Periods/cycle) This course is the science of matter which includes concepts and the scientists who discovered them. Particular emphasis will be placed on scientific thinking and scientific method. Topics include atomic theory, the Periodic Table, relationships between molecules, chemical bonding, the interrelationship between matter and energy, practical applications of chemical principles, and nuclear chemistry. Students must fulfill the laboratory requirement to be admitted to the required Regents examination at this end of the course. **Prerequisite:** Students must have successfully completed Earth and Space Science and Biology.
- **PHYSICAL SETTING: CHEMISTRY H (Year Course, 1 Unit, Grade 10 9 Periods/cycle)** Physical Setting: Chemistry H is a more challenging and a more in-depth course than Physical Setting: Chemistry R, and is designed for students who have successfully completed The Living Environment H and its Regents examination. Students must fulfill the laboratory requirement to be admitted to the required Regents exam at the end of this course. **Prerequisite:** Students must have successfully completed **Earth and Space Science** and **Biology.**
- PHYSICAL SETTING: PHYSICS H (Year Course, 1 Unit, Grades 11, 12 9 Periods/cycle) Physics H is a rigorous and in-depth course that covers the NYS Regents curriculum for Physics and is designed for students who have successfully completed Chemistry and its corresponding Regents examination. Students must fulfill the laboratory requirement to be admitted to the required Regents exam at the end of this course. Co-requisite: Algebra 2/Trig or its equivalent.
- ADVANCED PLACEMENT BIOLOGY (Year Course, 1 Unit, Grades 11, 12 9 Periods/cycle) AP Biology is a college-level course intended for motivated students. This course deals with the study of the simplest to most complex living organisms from a molecular perspective, with a focus on mechanisms of disease. Extensive laboratory work includes areas such as genetics, cellular biology, molecular biology and its connections to everyday life. Students who are enrolled in this course are also expected to pursue independent research projects and to take the Advanced Placement exam in May. Prerequisite: Successful completion of Physical Setting Chemistry, Biology, and Geometry or its equivalent.

# <u> SCIENCE</u> – Heather Bizewski, Nicole Rhodes, Robert Soel, District Chairs

- ADVANCED PLACEMENT CHEMISTRY (Year Course, 1 Unit, Grades 11, 12 9 Periods/cycle) AP Chemistry is a college-level course intended for motivated students. Laboratory activities involve the operation of the digital analytical balance, emission spectrometer, spectrophotometer, and pH meters. Topics of study include structure of matter, chemical reactions, and stoichiometry equilibria, redox, acid-base theory, kinetics, and thermodynamics. Students enrolled in this course are encouraged to pursue independent research projects and will take the Advanced Placement exam in May. Prerequisite: Successful completion of Geometry and Physical Setting: Chemistry.
- ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE (Year Course, 1 Unit, Grades 11, 12 9 Periods/cycle) AP Environmental Science is a college-level course intended form motivated students. It provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternate solutions for resolving or preventing them.
- ADVANCED PLACEMENT PHYSICS 1 (Year Course, 1 Unit, Grades 11, 12 9 Periods/cycle) AP Physics 1 is the first part of an algebra-based, two-year sequence equivalent to the first semester of a typical introductory, algebra-based, college physics course. This is a rigorous course intended for motivated students with a focus on the big ideas in an introductory college level physics sequence. This provides students with enduring, conceptual understandings of foundational physics principles. The course allows students to gain insight into the connections of physics to other disciplines and societal electrostatics, and electrical circuits. Students enrolled in this course are expected to pursue independent research projects and take the Advanced Placement exam in May. Prerequisite: Physical Setting: Physics and/or permission of department chair, Algebra 2/Trigonometry or its equivalent.
- ADVANCED PLACEMENT PHYSICS 2 (Year Course, 1 Unit, Grade 12 9 Periods/cycle) AP Physics 2 is the second part of an algebra-based, two-year sequence equivalent to the second semester of a typical introductory, algebra-based college physics course. It is a continuation of AP Physics 1 and is intended for motivated students. Through a big idea approach, students will gain the necessary enduring understandings of the foundation physics principles covered, including fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. Students enrolled in this course are expected to pursue independent research projects and take the Advanced Placement exam in May. Prerequisite: Algebra 2/Trigonometry or its equivalent and AP Physics 1.
- *ADVANCED PLACEMENT PSYCHOLOGY* (Year Course, 1 Unit, Grades 11, 12 6 Periods/cycle) AP Psychology is a college-level course intended for motivated students. Psychology is the science of behavior and mental processes. The purpose of this course is to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the methods psychologists use in their science and practice. It is expected that all students will take the AP exam in May. Prerequisites: Students must have successfully completed Biology.
- *MARINE BIOLOGY 1* (Semester Course, ½ Unit, Grades 10, 11, 12 6 Periods/cycle) Marine Biology 1 incorporates concepts of biology, earth science, and the physical sciences in the study of the wide diversity of organisms dwelling in the varied ocean environments. Several field trips form the core of the laboratory experience natural for this course. **Prerequisites:** Successful completion of Biology, or any Chemistry course.
- MARINE BIOLOGY 2 (Semester Course, ½ Unit, Grades 10, 11, 12 6 Periods/cycle) This course is a continuation of Marine Biology 1 and is designed to teach the structure and function of marine ecosystems. Students will be instructed as the adaptations of individual organisms and species as a whole play a role in maintaining healthy ecosystems. Each ecosystem will be covered in depth. The course also includes a section on how man has had, and continues to have, an impact on these ecosystems. While a prior knowledge of marine ecosystems from Marine Biology 1 would be beneficial, it is not required. Prerequisite: Students must have successfully completed Biology, or any Chemistry course.

# **SCIENCE** - Heather Bizewski, Nicole Rhodes, Robert Soel, District Chairs

- *COLLEGE GENETICS* (Semester Course, ½ Unit, Grades 10, 11, 12 6 Periods/cycle) Genetics is the science of heredity. Classical principles of genetics, together with the most modern advances in technology, are applied to the study of human traits. Some of the topics include how traits are inherited, genetic diseases and their causes, sex determination, birth defects, and the future of genetic engineering. All students may obtain college credit from St. John's University. Prerequisite: Successful completion of Biology.
- COLLEGE HUMAN ANATOMY AND PHYSIOLOGY (Semester Course, ½ Unit, Grades 10, 11, 12 6 Periods/cycle)
   This course deals with the structure and function of our bodies. How our bodies maintain the delicate balance characteristic of life is examined. Areas of study include digestion, circulation, respiration, excretion, synthesis, regulation, locomotion, and reproduction. Diseases and disorders of each system will be investigated. Students take a final exam. All students may obtain college credit from St. John's University. Prerequisite: Successful completion of Biology.
- FORENSIC SCIENCE 1 (Semester Course, ½ Unit, Grades 11, 12 6 Periods/cycle) This course is an introduction to the world of forensic science. The curriculum is designed to apply the principles of all areas of math, science, and technology to law. Specifically, this course will focus on the apprehension of criminal perpetrators, and to link them through physical evidence of crime scenes. Areas covered in the course will be the history of forensic science, collection, storage, and analysis of physical evidence including DNA, finger-, foot-, and tire printing, document analysis, blood and blood splatter analysis, and psychological profiles of the criminal mind. Careers in the criminal justice system will be discussed. This course terminates with a final exam. Prerequisite: Successful completion of Biology.
- *FORENSIC SCIENCE 2* (Semester Course, ½ Unit, Grades 11, 12 6 Periods/cycle) This course is a continuation and expansion of Forensic Science 1. Students will further investigate topics related to crime solving. Using a student-centered approach, the curriculum is designed to integrate interdisciplinary skills including mathematics, science, technology, and psychology. Through research, investigation, and inquiry-based laboratory activities, students will explore topics including skeletal analysis, poisons, bio-terrorism, entomology, ballistics, and the psychology of serial killers. This class will conclude with a final exam. **Prerequisite**: Biology, and Forensic 1.
- **ENVIRONMENTAL SCIENCE** (Year Course, 1 Unit, Grades 11, 12 6 Periods/cycle) This course is designed to help students understand the complex nature of our environment and make responsible decisions regarding its protection and use. Students will explore sources of pollution, energy problems and alternatives, global warming, ozone depletion, and habitat destruction and reclamation. Field studies and inquire-based investigations are an integral part of this course. This course meets the diploma requirements for a third year of science and ends with a uniform district exam. **Prerequisite:** Successful completion of Biology.
- *ASTRONOMY* (Semester Course, ½ Unit, Grades 10, 11, 12 6 Periods/cycle) Astronomy is an elective course that provides a broad survey of the field of astronomy in one semester of study. This course provides the opportunity to develop knowledge and understanding about the solar system, galaxy, and universe in which we live. It will incorporate concepts of historical accounts, mathematical investigations and engineering practices. Areas of study include the history of astronomy, our planetary system, cosmology, as well as space exploration programs. The course incorporates project-based learning. This course will culminate with a final exam or project. **Prerequisites:** Successful completion of Biology or Earth and Space Science.
- *METEOROLOGY AND SEVERE WEATHER* (Semester Course, ½ Unit, Grades 10, 11, 12 6 Periods/cycle) This is a one-semester science elective in meteorology. Lessons will introduce students to the science of meteorology and weather forecasting. Major topics include surface observations, atmospheric variables and conditions, cloud formation, pressure systems, severe weather events, and human impact. Special emphasis is placed on severe storms and systems that may impact students' lives, such as hurricanes, tornadoes, coastal flooding and more. This course will culminate with a final exam or project. **Prerequisites:** Biology or Earth and Space Science.



# SCIENCE - Heather Bizewski, Nicole Rhodes, Robert Soel, District Chairs

- THE SCIENTIFIC BASIS OF MINDFULNESS AND MEDITATION (Semester Course, ½ unit, Grades 10, 11, 12 6 periods/cycle) This course will focus on the scientific evidence that supports the practices of mindfulness and meditation. In this course, students will learn about the structure and function of their brain, and understand how to strengthen the neural pathways that lead to focusing their attention and concentration. Meditation is an active training of the mind to improve awareness, which aids practitioners with reducing stressors such as ruminating thoughts and anxiety. In addition to the brain-based aspect of this course, daily meditation and mindfulness practices will be an important part of the curriculum. This course culminates with a final project.
- STEAM Computer Science and Research (Year Course, alternating days, ½ unit, Grade 9) This course will engage students in a wide variety of introductory topics in the areas of digital literacy, coding, digital citizenship, cyber safety, engineering design, robotics, artificial intelligence, science research, and statistics. The overarching goal of the course is to enrich the math and science programs with fun problems and challenges that foster critical thinking, problem solving, teamwork, communication, creativity, innovation and technical skills. This course is offered to all ninth grade students, whose schedule permits, and will provide a foundation for future success in math, science, computer science and engineering electives.
- ADVANCED SCIENCE RESEARCH 2 (Year Course, 1 Unit, Grade 10 3 Periods/cycle + Independent Study) This course is the foundation of a three-year sequence designed to provide students with hands-on working experience in research methodology. The course is directed towards students who wish to pursue advanced areas of original research. During this year, students will be assisted in identifying and focusing on an area of research. They will be taught bibliographic research techniques including the use of college libraries, the Internet, and professional databases. In addition, students will contact potential mentors with the goal of locating a research facility in which they can pursue actual research during the year. In addition to the class meetings, each student will meet individually with the teacher once every 12 school days to monitor progress and ensure that all goals and objectives are being met. Students may obtain college credit from SUNY Albany.
- ADVANCED SCIENCE RESEARCH 3 (Year Course, 1 Unit, Grade 11 3 Periods/cycle + Independent Study) This is the second course in a three-year sequence and will provide students with additional experiences in research methodology. Students will design and carry out original research. Modifications will be made based on journal readings and consultations with the research mentor. Full time summer research may be required prior to the start of this course. During this year students will offer presentations on their research findings to their teacher, class, and school community. Students will make use of statistical analysis programs in order to evaluate the results of their work. It is expected that the original research will begin during this year and continue into the summer following this course. Students may obtain college credit from SUNY Albany. At the end of the year, the status of each student will be reviewed. There is a mandatory summer research component at the end of this course. Prerequisite: Advanced Science Research 2. Co-Requisite: Enrollment in an advanced science class and permission of the teacher and the science chairperson.
- ADVANCED SCIENCE RESEARCH 4 (Year Course, 1 Unit, Grade 12 3 Periods/cycle + independent study) This third and final course in a three-year sequence will provide students with more sophisticated experiences in research methodology. During senior year, students refine their papers based on their original research. Students will continue to make presentations of their research findings to their teachers, class, and school community. They write essays and prepare poster presentations for the Intel Science and Engineering Fair, Regeneron Science Talent Search, Junior Science and Humanities Symposium, Long Island Science Congress, and other appropriate contests and symposia while continuing to keep in close contact with their research mentor. In addition to class meetings, students will meet at least once every twelve school days one-on-one with their teacher. Full time summer research is required prior to the start of this course. Seniors in the course will share their expertise with younger researchers in ASR 2 & ASR 3. Students may obtain college credit from SUNY Albany. Prerequisite: Advanced Science Research 3. Co-Requisite: Enrollment in an advanced science class and permission of the teacher and the science chairperson.
- SCIENCE RESEARCH MENTORSHIP (Year Course, ½ Unit, Grades 10, 11, 12) With the help of a mentor, students will design and carry out scientific investigations at school or in research facilities such as hospitals and universities. Students are expected to complete an independent research project and write a scientific paper reflecting their research. This paper/project may be presented at a symposium or entered in a research competition such as the Regeneron Science Talent Search, the Long Island Science Congress, and the Long Island Science and Engineering Fair. At mid-year and year-end, the Science department will review each student's status in the program. Prerequisite: Permission of the mentorship teacher and the Science Chairperson.

# SOCIAL STUDIES – Tim Dolan, Ann Donaldson, Robyn Einbinder, District Chairs

All students are required to take four years of Social Studies. Courses in Social Studies are designed to assure that students will gain understanding of the political, economic, geographic, and social forces which have shaped the history and development of America, as well as the other nations and regions of the world. Emphasis is on the analysis of data to develop concepts, understandings and skills in the social sciences. Students will be expected to communicate information clearly and effectively in both oral and written form.

- **GLOBAL HISTORY AND GEOGRAPHY I (Year Course, 1 Unit, Grade 9)** Global History and Geography I begins with the Paleolithic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems. While the course emphasizes the importance of historical thinking, all of the Social Studies Practices and Standards, as designated by the New York State Framework, are included in the study of Global History and Geography I. The course ends with a final exam.
- **GLOBAL HISTORY AND GEOGRAPHY IH (Year Course, 1 Unit, Grade 9)** Global History and Geography IH is based upon the social studies standards (history, geography, economic and civics/government), and is the first half of the Advanced Placement World History course. Students will investigate the content of world history for significant events, individuals, developments, and processes, and develop and use the AP Historical Reasoning Skills and AP Disciplinary Practices employed by historians when they study the past. The course also provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places encompassing the five major geographical regions of the globe. This course prepares students for the Advanced Placement World History: Modern course that is offered in 10th grade. This course ends in a final exam.
- GLOBAL HISTORY AND GEOGRAPHY II (Year Course, 1 Unit, Grade 10) Global History and Geography II starts with a snapshot of the world circa 1750. The course continues chronologically up to the present. Several concepts are woven throughout the course including industrialization, nationalism, imperialism, conflict, technology, and the interconnectedness of the world. The last three Key Ideas focus on global issues, applying a more thematic approach. While the course emphasizes the importance of historical thinking, all of the Social Studies Practices and Standards as designated by the New York State Framework are included in the study of Global History and Geography II. This course ends with the Global History and Geography II Regents Exam.
- ADVANCED PLACEMENT WORLD HISTORY: MODERN- (Year Course, 1 Unit, Grade 10) The AP World History: Modern course is a college-level course in which students investigate the content of world history for significant events, individuals, developments, and develop and use the same AP Historical Reasoning Skills and AP Disciplinary Practices employed by historians when they study the past. The course also provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places encompassing the five major geographical regions of the globe. All students will take the AP World History: Modern Exam and the Global History and Geography II Regents Exam at the end of grade 10.
- SOCIAL STUDIES WRITING APPLICATIONS: GLOBAL HISTORY (Semester Course, ½ Unit, Grade 10) This course is intended to provide additional academic support for identified students to develop their writing skills required for success on the Global History and Geography II Regents Exam. This second semester class complements the required tenth grade course in Global History and Geography II. Students are identified based on final "S" grades and final exam grades in ninth grade Global History and Geography, and the first two marking period grades of tenth grade.
- **UNITED STATES HISTORY AND GOVERNMENT (Year Course, 1 Unit, Grade 11)** This course studies U.S. History and Government. It stresses an understanding of enduring Constitutional issues that have impacted our political, economic, and social history. This course ends with the U.S. History and Government Regents Exam.



# SOCIAL STUDIES — Tim Dolan, Ann Donaldson, Robyn Einbinder, District Chairs

- ADVANCED PLACEMENT UNITED STATES HISTORY (Year Course, 1 Unit, Grade 11) This course focuses on the development of AP Historical Reasoning Skills and AP Disciplinary Practices to develop students' abilities to think conceptually about United States history from approximately 1491 to the present (divided into nine different time periods). Seven themes provide areas of historical inquiry for investigation throughout the course. These areas of inquiry require students to reason historically about continuity, change over time, and make comparisons among historical developments in different times and places. All students will take the AP United States History Exam and the United States History & Government Regents Exam at the end of grade 11.
- SOCIAL STUDIES WRITING APPLICATIONS: UNITED STATES HISTORY (Semester Course, ½ Unit, Grade 11) This course is intended to provide additional academic support for identified students to develop their writing skills required for success on the U.S. History and Government Regents Exam. This second semester class complements the required 11th grade course in U.S. History and Government. Students are identified based on final "S" grades and the Regents grade in 10th grade Global History and Geography II.

Grade 12: All 12<sup>th</sup> grade students must take either Participation in Government and Economics, Advanced Placement United States Government and Politics and Economic Theory H, Advanced Placement Macroeconomics and Government Theory H, or Advanced Placement Microeconomics and Government Theory H.

- *ECONOMICS* (Semester Course, ½ Unit, Grade 12) This course introduces students to principles and theories that are the foundation of our economic system. Students will study the interrelationships of economics, business, and finance in our regional, national, and global economies. In addition, students will learn the importance of entrepreneurship and will be introduced to personal financial planning. This course ends in a final exam.
- PARTICIPATION IN GOVERNMENT (Semester Course, ½ Unit, Grade 12) This course will create an active and involved citizen who will have hands-on experience in all levels of government. Students will be encouraged to make connections between the structure of the governmental process and the role of the citizen in influencing this process. Activities will be planned that help to emphasize the complex forces which influence public policy. This course will end with an evaluation of the students' participation in the political process. Community service is a requirement of this course.
- ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS (Semester Course, ½ Unit, Grade 12) This course provides students with a nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behavior. They also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they complete a political science research or applied civics project. This course provides an alternative approach to the twelfth-year required government curriculum with an enriched program. It is expected that students will conclude this course with the AP US Government and Politics Exam.
- ADVANCED PLACEMENT MACROECONOMICS (Semester Course, ½ Unit, Grade 12) This course provides students with a thorough understanding of the principles of economics that apply to an economic system as a whole. Placing particular emphasis on the study of national income and price-level determination, it develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. This course provides an alternative approach to the twelfth-year required economics curriculum with an enriched program. It is expected that students will conclude this course with the AP Macroeconomics Exam.
- ADVANCED PLACEMENT MICROECONOMICS (Semester Course, ½ Unit, Grade 12) This course provides students with a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy. This course provides an alternative approach to the twelfth-year required economics curriculum with an enriched program. It is expected that students will conclude this course with the AP Microeconomics Exam.

# SOCIAL STUDIES – Tim Dolan, Ann Donaldson, Robyn Einbinder, District Chairs

- **ECONOMIC THEORY H** (Semester Course, ½ Unit, Grade 12) This course will challenge students to grasp the theories of economics and their application to the economic system of our country. Students will take an active role in exploring the relationship of politics and economics as they interact in the larger national and international areas. Specific areas covered will include monetary and fiscal policy, supply and demand, the stock market, and the banking system, among others. This course is the complement to Advanced Placement United States Government and Politics.
- GOVERNMENT THEORY H (Semester Course, ½ Unit, Grade 12) This challenging course will provide students with an overview of the unique identity and character of United States government and politics. Students will gain an understanding of the trends, events, and policies influencing the development of American government from 1787 to the present. Students will be encouraged to make connections between the structure of the governmental process and the role of the citizen in influencing this process. Students will analyze, evaluate, and debate the enduring constitutional issues in relationship to economic trends and policies. This course is the complement to Advanced Placement Macroeconomics and Advanced Placement Microeconomics.

#### **SOCIAL STUDIES ELECTIVES**

- FOUNDATIONS OF THE JUSTICE SYSTEM (CRIMINOLOGY 1) (Semester Course, ½ Unit, Grades 10, 11, 12) This is an introductory course that will explore basic aspects of the criminal justice system including the need for law, arrest process rights, and due process through trial. The course is designed to encourage active student participation through cooperative learning, peer teaching, oral presentations, role-playing, and participation in a mock trial. This course may require written projects and/or a final exam.
- *CRIMINAL LAW (CRIMINOLOGY 2)* (Semester Course, ½ Unit, Grades 10, 11, 12) The purpose of this course is to introduce students to the origin and function of criminal law in New York State. The focus will be on review of major offenses in common law and modern penal law, as well as a discussion of defense arguments. The course is designed to encourage active student participation through cooperative learning, peer teaching, oral presentations, and role-playing. This course may require written projects and/or a final exam.
- **PSYCHOLOGY 1 (Semester Course, ½ Unit, Grades 10, 11, 12)** The basic direction of this introductory course is to help students develop some insight into human actions and feelings through the study of common life experiences. Role-playing, simulations, case studies, and cooperative learning are among the teaching techniques used. This course may require written projects and/or a final exam.
- **PSYCHOLOGY 2** (Semester Course, ½ Unit, Grades 10, 11, 12) This course begins with an investigation of the theories of human emotions, motivation, and personality development. Students will be introduced to a variety of psychological testing instruments utilized by professionals. Additional units of instruction will focus on the nature of stress and stress management techniques, behavior disorders and their treatment, and the prevention and treatment of mental disorders. This course may require written projects and/or a final exam. **Prerequisite:** Psychology 1.
- SCHOOL AND COMMUNITY LEADERSHIP: A SERVICE LEARNING EXPERIENCE (Year Course, 1 Unit, Grades 10, 11, 12) The basis of this course is to teach leadership skills while building self-esteem, social skills, and confidence. The course will consist of a curriculum that incorporates five major areas: communication, group process, managerial skills, self-awareness, and human relations. This elective will encompass many of our district initiatives such as Service Learning, Character Education, Civic Education, and School and Community Engagement.
- SPORTS IN AMERICAN CULTURE (Semester Course, ½ Unit, Grades 10, 11, 12) Students analyze the role sports play in American life, the development of sports in America, as well as an in-depth investigation of contemporary issues in the world of sports are offered. This course may require written projects and/or a final exam.

# SOCIAL STUDIES — Tim Dolan, Ann Donaldson, Robyn Einbinder, District Chairs

- *COLLEGE SOCIOLOGY* (Semester Course, ½ Unit, Grades 10, 11, 12) This course investigates groups and their structure in human society. Students identify the main forces that hold groups together, with special focus on culture, religion, education, the family, society, and the individual. This course may require projects and/or a final exam. This course may be taken for college credit through St. John's University. <a href="https://www.stjohns.edu/admission/other-programs/high-school-scholars-program">https://www.stjohns.edu/admission/other-programs/high-school-scholars-program</a>
- ADVANCED PLACEMENT EUROPEAN HISTORY (Year Course, 1 Unit, Grades 10, 11, 12) This course requires a commitment by the student to complete extensive college-level reading and writing assignments. In addition to examining the social, political, and economic history of Europe from the Renaissance to the present, students will also investigate and analyze historical events from a global perspective. Students will employ the AP Historical Reasoning Skills and the AP Disciplinary Practices. It is expected that all students will take the AP European History exam in May.
- ADVANCED PLACEMENT HUMAN GEOGRAPHY (Year Course, 1 Unit, Grades 10, 11, 12) This course contains subject matter that blends historical perspective with issues that are relevant to the contemporary world, including local, national and global current events. Human Geography is a social science class that extends beyond the parameters of history. The course will provide students with the ability to explore important topics such as population and migration, culture, politics, agriculture, food production, cities, and economic development. It is expected that all students enrolled in this course will take the AP Human Geography Exam.
- VOICES FROM THE PAST: A STUDY OF GENOCIDE IN HISTORY (Year Course, ½ Unit English, ½ Unit Social Studies, Grades 10, 11, 12) This interdisciplinary course will focus on the Holocaust, and other past and present examples of genocide. Students will use literature, first person narratives, and historical accounts in order to understand the causes of genocide, the rise of hate crimes, and most importantly, way to prevent "man's inhumanity to man" now and in the future. Students will develop an understanding of the roles and responsibilities of individuals, organizations, and governments. This one-period, yearlong course is a Social Studies and English elective, and is also listed under English. This course may be taken for college credit through Long Island University.
- *US HISTORY:* 1945 *PRESENT* (Semester Course, ½ Unit, Grades 10, 11, 12) This course focuses on modern United States History. From the start of the Cold War to today's war against terrorism, students will come to understand specific events and decisions from a national and global perspective that have shaped our lives today. The course encourages critical thinking and problem solving skills, and includes an examination of the role of the media in shaping public opinion. It is the goal of this course to make recent history come alive in a clear, coherent, and meaningful way.
- GLOBAL CITIZENSHIP (Semester Course, ½ Unit, Grades 10, 11, 12) Designed as a pathway for students to become informed citizens, the course will expose students to a spectrum of social and political issues in the local, national and global arenas. Students will have the opportunity to develop and hone their digital literacy, research, presentation, problem solving and advocacy skills. Topics will vary by semester as student exploration will be tied to student interest.

# **SPECIAL EDUCATION** – Emily Paluseo, Director

### Maura Kempton, Assistant Director

Barbara Kubler, Theresa Catalina, Justin Gioia, John Jimenez, Katherine Lessig, Melissa Rohr, Andrea Sheridan, District Chairs

Students thought to have a disability which impacts their educational performance are referred to the Committee on Special Education. Upon referral, a comprehensive, educationally-oriented evaluation is conducted to help the committee determine if a disability exists, and if so, the type of disability.

#### **CONTINUUM OF SERVICES**

The following services and programs represent the special education continuum of services ranging from the least restrictive to the more restrictive programs. Based upon the Committee of Special Education (CSE) meeting with the parent/guardian, an Individualized Education Plan (IEP) is developed, which may include any of the following programs and/or services:

- ALTERNATE DAY SUPPORT
- RESOURCE ROOM PROGRAM
- COLLABORATIVE/INCLUSION CLASS
- PREP PROGRAM MERRICK AVE MIDDLE SCHOOL & CALHOUN HIGH SCHOOL
- MORE PROGRAM MERRICK AVE MIDDLE SCHOOL
- COORE PROGRAM CALHOUN HIGH SCHOOL
- PREP FOR THE FUTURE VOCATIONAL TRAINING PROGRAM CALHOUN HIGH SCHOOL
- PREP ACADEMY BROOKSIDE
- RELATED SERVICES
  - o Behavior Intervention Services
  - Counseling Services
  - Hearing Services
  - Occupational Therapy
  - Physical Therapy
  - o Psychological Services
  - Rehabilitation Counseling Services
  - Social Work Services
  - Speech Therapy
  - Vision Services



# **WORLD LANGUAGES** - Rosa Kaplan, Renée Owenburg, Kristyn Pellegrini, District Chairs

Students may select from French, Italian, Mandarin or Spanish prior to entering the 7<sup>th</sup> grade. Throughout their course of study, students develop the four language skills, listening, speaking, reading, and writing. To increase global awareness and develop an appreciation of other cultures, students will focus on a variety of topics connected to French, Italian, Chinese, and Spanish-speaking countries.

Students are required to earn one (1) unit of high school world language credit for a New York State Regents Diploma and three (3) units of credit are necessary for a New York State Regents Diploma with Advanced Designation.

Students will earn their first high school credit for World Languages upon the successful completion of their World Language 7 and 8 courses and passing a Checkpoint A examination. A typical high school sequence begins with level 2/2H.

- SPANISH 1 (Year Course, 1 Unit, Grade 9) This beginning level course is designed for students with no previous language experience. This class is also available to students who were not successful in their middle school language courses. A communicative approach will be used to present the Checkpoint A curriculum.
- FRENCH 2H, ITALIAN 2R/2H, MANDARIN 2H, SPANISH 2R/2H (Year Course, 1 Unit, Grade 9) This course is designed to move students towards a stronger proficiency in their chosen language of study. The communicative approach continues to be the basis of instruction with students learning to use their language skills more independently. Authentic experiences expose the students to a range of language practice and cultural knowledge. Honors courses will prepare students for the Advanced Placement exam. Each course (R and H) ends in its own district final examination.
- FRENCH 3H, ITALIAN 3R/3H, MANDARIN 3H, SPANISH 3R/3H (Year Course, 1 Unit, Grade 10) The level 3 course is designed to help students master their chosen language in preparation for the end-of-year Bellmore-Merrick Checkpoint B exam and future upper-level language courses. In addition to the state and district curriculum topics, this course focuses on the themes that are woven into the Checkpoint B exam. This course also focuses on communication and multimedia resources. Both levels (R and H) culminate in the Bellmore-Merrick Checkpoint B exam, which grants students New York State Regents credit.
- PROGRESSIVE FRENCH, ITALIAN: SECOND WORLD LANGUAGE SEQUENCE (Year Course, 1 Unit, Grades 10, 11, 12) These courses are designed for the skilled language student. The student will progress through the first two elementary years of study in one year. Students will develop their reading, writing, speaking, and listening skills in an additional world language.
- ITALIAN 4, SPANISH 4 (Year Course, 1 Unit, Grades 11, 12) Students will apply the skills they have learned in a varied curriculum including literature, composition writing, and oral and written presentations. Authentic materials, including films, current events, periodicals, and Internet sources will be used to improve the students' abilities. The 4th level courses are excellent preparation for college-level courses. These courses end with a district final examination.
- **COLLEGE ITALIAN, COLLEGE SPANISH (Year Course, 1 Unit, Grade 12)** These courses are intended for students who have successfully completed all four levels of world language and who wish to pursue college-level studies while still in high school. The emphasis will be on formal and informal spoken language, acquisition of vocabulary and structure. Students can elect to take these courses for college credit through Molloy University. These courses end with a district final examination.
- FRENCH 4H, ITALIAN 4H, MANDARIN 4H, SPANISH 4H (Year Course, 1 Unit, Grade 11) These courses build on the level 2H and 3H classes in preparation for the Advanced Placement examination in each language. Students will master their listening, speaking, reading, and writing skills. Literature, authentic materials, and multimedia will be used to develop ability and proficiency. This course will end with a district exam.
- ADVANCED PLACEMENT FRENCH LANGUAGE, ADVANCED PLACEMENT ITALIAN LANGUAGE, ADVANCED PLACEMENT
   CHINESE LANGUAGE, ADVANCED PLACEMENT SPANISH LANGUAGE (Year Course, 1 Unit, Grade 12) These
   courses prepare students for the Advanced Placement language examinations. Students are taught to achieve greater
   mastery of skills and to reach advanced level/college proficiency. The final evaluation in this course is the AP
   examination. It is expected that all students will take the Advanced Placement examination at the end of the year.

