

**OLD BRIDGE HIGH SCHOOL**

# **COURSE OFFERINGS**

## **2023-2024**



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**(1/15/23)**



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## **GENERAL INTRODUCTION**

The staff of Old Bridge High School has designed this catalog to offer students, parents, and the general public a comprehensive and centralized view of the course offerings, requirements, and other pertinent information necessary to make intelligent choices in preparation for student scheduling. It is provided as a “quick reference” for information concerning curriculum areas, course prerequisites, and course graduation requirements.

The selection of courses in a student’s program is a serious matter and one which has long term effects.

In order to provide the greatest opportunity for success, both students and parents should take time to familiarize themselves with the content of this publication prior to the student’s finalization of his or her academic program schedule.

It is, however, only a single tool in the important and complex process of high school scheduling. It should never be viewed as a replacement for thoughtful discussions between parents and their children and students and their guidance counselors. Please take time to acquaint yourself with the contents of this tool. Do not hesitate to call upon the high school guidance department for assistance or to answer any questions. Remember, the greatest assurance of a successful career in Old Bridge High School is ongoing and cooperative interaction between staff, students, parents, and teachers. Only through a team effort can we assure the children of Old Bridge the highest quality education possible.

## **DISCLAIMER**

Please keep in mind that this publication is a scheduling guide. It is not represented, nor should it be interpreted, as the official establishment of graduation credit requirements, curriculum content, or college admissions policy and/or procedure. Official graduation requirements are found in the adopted policies of the Old Bridge Board of Education. College admissions requirements or policies vary from college to college and are generally found within the admissions catalog of each particular institution of higher learning. To review the official course content or curricula, please refer to the Course of Study or the Curriculum Guides, which are available through the various high school departments.

## **OLD BRIDGE HIGH SCHOOL OVERVIEW**

Old Bridge High School is a comprehensive high school in the traditional sense. It offers students a variety of fundamental requirements and course electives designed to foster a love of learning and provide a foundation upon which each student may grow and build. Old Bridge graduates well-rounded, academically competitive young men and women prepared to either continue their education or enter the armed services or work force.

The high school offers in excess of 180 major academic and special interest electives. A basic knowledge of the scope and sequence of these courses, the prerequisite skills and expectations, and the effort level expected will enable students and parents to intelligently plan a high school program specifically designed to promote learning.

In this booklet, each course is presented in summary form and indicates a general description of the sequence of skills, concepts, appreciations, and understandings suggested as outcomes. Descriptions indicate whether or not the course is a mandatory requirement (successful completion is necessary to be awarded an Old Bridge diploma) or an elective. It also indicates the credits earned by successful completion, length of time prescribed for the course, and any prerequisites.

All students are offered forty (40) scholastic credits per year. This means that the majority of students will carry eight (8) subjects each year. A listing and description of those courses are contained within this booklet. The selections made should be a matter of serious thought since future course selection or entry into certain careers may be affected.

The broad range of electives provides the opportunity for a diverse educational experience. However, schedule programming must always focus upon the requirements necessary for a student to graduate successfully and on time. Course selection should be based on careful consideration of each student’s strengths, weaknesses, aptitudes, previous level of achievement, and interests coupled closely with the student’s educational or career goals following graduation.

## **PLEASE NOTE:**

- **All things are subject to change and pending Board of Education’s approval.**
- **Course selection requests for electives are not guaranteed and are based on availability.**
- **The last day to submit a course change request is SEPTEMBER 15<sup>th</sup>.**



## **HIGH SCHOOL GRADUATION REQUIREMENTS**

In order to receive a standard high school diploma presented by a public school district in the State of New Jersey, local boards of education are minimally bound by the provisions of *N.J.A.C. 6A:8-5.1, Graduation Requirements*. Additionally, in order to receive a standard high school diploma from the Old Bridge Public School District, students must fulfill all requirements listed in the Old Bridge Board of Education Policy # 5460. Those requirements include: a minimum accumulation of 120 credits; successful completion of the specific course requirements as contained therein.

### **Graduation Assessment Requirements: Classes of 2024-2025**

**ELA:** If, after completing the New Jersey Graduation Proficiency Assessment in grade 11, students did not demonstrate proficiency by passing the ELA component, such students may access the following pathways:

- **Pathway 2:** By meeting the designated cut score on a substitute competency test; or
- **Pathway 3:** By submitting, through the district, a student portfolio appeal to the New Jersey Department of Education.

**Mathematics:** If, after completing the New Jersey Graduation Proficiency Assessment in grade 11, students did not demonstrate proficiency by passing the mathematics component, such students may access the following pathways:

- **Pathway 2:** By meeting the designated cut score on a substitute competency test; or
- **Pathway 3:** By submitting, through the district, a student portfolio appeal to the New Jersey Department of Education.

### **Required Courses**

Successful completion of the following courses and credits are required:

- Twenty (20) credits in English consisting of any level course entitled English I, II, III, and IV
- Fifteen (15) credits in non-BSIP mathematics (Algebra I if not taken in Grade 8), Geometry & a third-year math)
- Fifteen (15) credits in social studies consisting minimally of United States and New Jersey history as required by *N.J.S.A. 18A:35-1 and 2*, and a one year course of world history and cultures;
- Fifteen (15) credits of natural or physical science
- Physical education, health and safety five credits each year as required by *N.J.S.A. 18A:35-5, 7 and 8*
- At least five credits in (1) visual arts or (1) performing arts
- Five (5) credits in world languages
- Two and a half (2.5) credits in personal finance
- Five (5) credits in career and technical education/21st Century Life and Career

## **COURSE ACCELERATION/ADVANCEMENT**

Students may opt to enroll in courses to accelerate their program and/or to advance a course level. A common example of advanced coursework is the student who takes an additional math course to advance to the next level. The following guidelines must be followed in order to receive advancement for any courses taken outside of Old Bridge High School:

- Parents/Guardians are responsible for completing application by June 1<sup>st</sup> for any course to be approved for advancement the following year. All course requirements must be completed and submitted by August 15<sup>th</sup>.
- Parents/Guardians are responsible for all expenses associated with outside course(s)
- Final course grade will be added to student's record but will not be reflected in the GPA calculation.
- Please note that all pre-requisites for placement the following year will be adhered to per Old Bridge High School Course Offering Book.
- See Appendix A



## **ATTENDANCE POLICY**

In accordance with Old Bridge Public Schools Board Policy 5200, any high school student exceeding sixteen (16) absences that do not fall within the category of excused days or are not waived by the appeals committee will not receive any credit for courses taken and will be required to repeat those courses. Regular attendance is essential to the successful completion of a course of study, and pupils are expected to be present every day that school is in session. Students with continuous absences beyond 10 days require removal of the student from the school rolls. Students who have been removed must re-register upon their return to school. Pursuant to N.J.A.C. 6A:16-7.6(a)(3), the Old Bridge School District defines an "excused absence" to include only the following:

- A. For a full day or a portion of a day for the observance of a religious holiday
- B. The closure of a busing district that prevents a student from having transportation to the receiving school.
- C. For visits to post-secondary educational institutions (maximum of 3 visits)
- D. Veteran's Day
- E. Take Our Children to Work Day

## **ABSENCES**

If the Attendance Office does not receive a call from a parent or guardian stating the student is going to be absent, the parent or guardian will receive a call/alert from the Attendance Office. Parents should contact the school Attendance Office by 9:00 a.m. to report a student's absence. This does not constitute an excused absence.

## **APPEALS**

Since the District recognizes that extenuating circumstances may exist in isolated cases regarding the absence of students beyond those covered by the ATTENDANCE POLICY, Old Bridge H.S. has established an Appeals Committee comprised of staff members to review any appeal regarding any absence from students and his/her parent or guardian.

1. Students may be subject to appropriate discipline for their school attendance record.
2. A student who has been retained at grade level for excessive absences may appeal that action in accordance with Policy 5410.
3. A student who has been dropped from a course and/or denied course credit from excessive absences may appeal that action in accordance with the following procedures:
  - a. The student shall file a written appeal to the Principal or designee within five (5) school days of receiving notice of the action. The appeal should state the reasons for each absence, any documentation that may support reducing the number of absences for the purposes of course credit, and reasons why the student should either continue to be enrolled in the course or receive course credit for a class the student completed.
  - b. The Principal or designee will respond in writing no later than seven (7) school days after receiving the student's appeal.
  - c. If the student is not satisfied, he/she may submit a written request to the Principal for consideration by an Attendance Appeals Committee, which shall be designated and constituted by the Superintendent. Any such appeal must be filed with the Principal not later than seven (7) days from receipt of the Principal's determination.
  - d. The Attendance Appeals Committee shall meet informally to hear the student's appeal. The student's parent and teacher(s) may attend the meeting.
  - e. The Attendance Appeals Committee shall decide the appeal and inform the student in writing within seven (7) school days of the meeting. Upon proof presented by the parent/guardian of exceptional circumstances beyond the control of the student and parent/guardian, which shall be determined on a case-by-case basis without precedential effect, the Attendance Appeals Committee may grant grade promotion to the student, notwithstanding the existence of excessive absenteeism.
  - f. The student may appeal an adverse decision of the Attendance Review Committee to the Superintendent, whose decision shall be the final district determination in the matter. The Superintendent's determination may be appealed to the Commissioner of Education in accordance with Policy 5710, Pupil Grievance and N.J.A.C. 6A:3. An appeal to the Attendance Appeals Committee shall be considered to have exhausted the first two steps of the grievance procedure outlined in Policy 5710.

In addition, Old Bridge H.S. has developed procedures in accordance with the District policy for the periodic notification of parents if the number of absences increases, and upon the accumulation of the sixteenth and final absence. Letters will be sent on the 5th, 10th, 15th and 17th absence for all full year courses. For courses that are half year or 1 marking period, classroom teachers will send courtesy notification when a student is in danger of losing credit for the course.



## **CONSEQUENCES RELATING TO ATTENDANCE**

1. Two (2) lates to class equal one (1) absence. A class cut is an absence.
2. Upon exceeding sixteen (16) absences from a full year class, no credit will be given for that class, and a grade of "L" will appear on the report card.
3. Students in less than a full year class will receive an "L" if they exceed four absences in a marking period class, eight absences in a semester class and twelve absences in a physical education class.
4. When a student receives an "L" grade he/she must attend summer school or make up the class the next school year to achieve credit. Upon completion of the summer school course, a separate summer school grade will be recorded on the transcript.
5. No senior may participate in graduation unless he/she has fulfilled all marching requirements before graduation day.

## **EARLY DISMISSAL**

Students who are under 18 years of age may not, under any circumstances, sign themselves out of school for medical or personal reasons without prior written parent consent. If your child needs to leave school early on any given day, you must submit a note to the school in advance. No student will be released early from school on a verbal authorization from a parent. If we receive a parental note in advance of the student's release, the school will contact the parent with a home, cell, or work phone number on file to verify the authenticity of the request. Notes which indicate "personal" as the reason for being excused will not be accepted. It is requested that medical appointments not be made during school time. Proper identification (ex. driver's license) is required when picking up a child for early release.

Students who are 18 years of age or older, by law, are permitted to sign out of school. However, the school will contact the parent with a home, cell, or work phone number on file to verify the authenticity of the request. Students are not permitted to return to school without a documented note (i.e. doctor, dentist, etc.). Please understand that this policy is in place to ensure student safety. This policy will be consistently enforced by the high school administration, attendance office, and health office.

## **LATE TO SCHOOL**

IF YOU ARRIVE LATE TO SCHOOL, YOU MUST REPORT DIRECTLY TO THE ATTENDANCE OFFICE UPON ENTERING THE BUILDING TO SIGN-IN. Students arriving to period one or any succeeding period more than ten minutes late without a valid excuse will be regarded as absent from that class and will not be given credit for that period. (See Attendance Policy) Arriving late to school will result in discipline according to the following schedule:

Late to school – 4<sup>th</sup> offense – 1 After School Detention

Late to school – 8<sup>th</sup> offense – 1 AIP

Late to school – 12<sup>th</sup> offense – 1 After School Detention and Parent Conference

Students who reach over 16 lates to school will be subject to escalating discipline at the discretion of the administration.

**MAKE-UP WORK** - It is the student's responsibility to obtain any missed assignments, class work, or tests from the teacher due to any absence.



## **FINAL AVERAGE GRADING PROCEDURES FOR SUBJECTS AND FINAL EXAM**

**Five** grades will be considered: One (1) grade for each marking period and a final exam grade. Each MP is calculated at 22.5% and the Final will be calculated at 10%.

- 1) Grades on the Report Card will be represented by a numeric value. (100-50, or below)
- 2) For First, Second, and Third Marking periods, students will not be able to receive a numeric grade lower than 50.
- 3) Assign a letter grade according to the following scale:

100-98	A+
97-94	A
93-90	A-
89-87	B+
86-84	B
83-80	B-
79-77	C+
76-74	C
73-70	C-
69-65	D
64-60	D-
59 and below	F

- 4) In order for students to receive a passing grade for the year they must have a 60 average at the end of the school year.

### **Example**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Final</b>
Grades:	75	82	87	90	80
Possible Points	100	100	100	100	100
Percentage	22.5%	22.5%	22.5%	22.5%	10%

MP Equation =  $334/400 \times .90 = 75.1$       Final Grade =  $75.1 + 8 = 83.1$  or 83 % (B-)

Final Equation =  $90/100 \times .10 = 8$

## **FINAL AVERAGE GRADING PROCEDURES FOR HALF-YEAR COURSES (2.5 CREDITS)**

Three grades will be considered: One (1) grade for each marking period and a final exam grade (to be completed during their block schedule).

1. Grades on the Report Card will be represented by a numeric value. (100-50, or below)
2. For First (or Third Marking periods) students will not be able to receive a numeric grade lower than 50.
3. Assign a letter grade according to the following scale:

100-98	A+
97-94	A
93-90	A-
89-87	B+
86-84	B
83-80	B-
79-77	C+
76-74	C
73-70	C-
69-65	D
64-60	D-
59 and	F

### **Example**

	<b>1</b>	<b>2</b>	<b>Final</b>
Grades:	85	91	88
Possible Points	100	100	100
Weighted:	45%	45%	10

MP Equation:  $88 \times .90 = 79.2$

Final Equation:  $88 \times .10 = 8.8$

Final grade:  $79.2 + 8.8 = 88$  average (B+)



### **PHYSICAL EDUCATION- THREE MARKING PERIODS**

Three grades will be considered: One (1) grade for each marking period and a final exam grade (to be completed during their block schedule).

1. Grades on the Report Card will be represented by a numeric value. (100-50, or below)
2. For two (2) marking periods of the three (3) marking periods, students will not be able to receive a numeric grade lower than 50.
3. Assign a letter grade based on the above grade scales for Full and Half-year courses.

#### **Example:**

	<b>1</b>	<b>2</b>	<b>3</b>
Grades: 50	90	73	
Possible Points:	100	100	100
Weighted:	33.3%	33.3%	33.3%
MP Equation:	193/3 = 71 average (C-)		

### **FINAL EXAM EXEMPTIONS- GRADE 9-12**

If any part of the final assessment is conducted as a class activity or project during class time, and is evaluated as part of the course grade, the exemption does not apply. These exemptions are only for exams given after classes are completed – during the scheduled final exams in June.

Any student (Grade 9-12) meeting the criteria listed below will be exempt from final examinations. To be exempt a student must have:

- All four marking period grades must average a 94 or higher.

Any student who meets the above criteria are to be given the average grade of all four marking periods for the final examination grade. Student exemption from final exams may be determined by the teacher.

Example: Each MP grade average  $(94+92+96+98)/4 = 95$   
Student is exempt and will earn a 95 for final examination grade.

**PLEASE NOTE:** It is recommended that all students calculate their grade point average at the conclusion of each academic year

### **REQUEST FOR COURSE CHANGES**

The goal of every faculty member at Old Bridge High School is to ensure the correct placement and academic success of our students. To that effect, requests for course changes can be made at the beginning of the year until SEPTEMBER 15<sup>th</sup>. In an attempt to maintain the necessary continuity at the beginning of the school year for all our students' academic success, students may only request course changes through SEPTEMBER 15<sup>th</sup>. Any requests for course changes made after that date will not be honored. Level changes will only be honored through the end of the first marking period. For any student who drops a level, all grades, including marking period, will transfer from the old course to the new course.

### **CRITERIA USED FOR DETERMINING CLASS RANK (Grade 12)**

Class rank is determined by the student's cumulative grade point average in all subjects. This process is in accordance with Board of Education Policy # 5430. The difficulty ranking of class designations from most to least difficult are: (1) Advanced Placement (AP); (2) Honors; (3) College Preparatory (CP); and (4) General. Not all courses or departments have varying designations of difficulty. In order to identify those courses, which have varying "weights," refer to the course descriptions, which will follow within this publication. The valedictorian and salutatorian shall be determined in accordance with Board of Education Policy # 5440.

AP and Honors courses are weighted for the purpose of calculating and determining class rank. AP courses are assigned two (2) additional quality points for each credit earned, while Honors courses are assigned one (1) additional quality point for each credit earned. All subjects, regardless of weighting, including electives, physical education/health, up to a maximum equivalent of eight full-year courses per year, are used to compute class rank.

### **Rutgers School of Health-Related Professions Health Science Careers Program**

OBHS is one of 60 high schools in New Jersey that has a partnership with Rutgers University in which junior and senior students have the opportunity of earning college credits. The mission of the program is to provide school to college or school to career preparation for multiple health careers. To participate in the Health Science Career program the student must meet the qualifications and complete a Rutgers Health Science Career application for approval. To receive a transcript from Rutgers a student must be in the program for two years and pass the Rutgers standardized final exam. Students will be charged a fee to take the exam and a fee to request a Rutgers transcript.



The program requires 10 hours of clinical experience for each year the student is in the program. The instructor for the program will be an OBHS faculty member and must be a Rutgers, SHRP faculty (or adjunct) member.

### **The Early College Program (ECP)**

All Old Bridge High School students have the opportunity to earn an Associate Degree or college credits from Middlesex College by enrolling in specific courses offered at OBHS. Students will learn and engage in college-level coursework in the familiar environment of our high school. With successful completion of the coursework, students have the opportunity to earn an Associate Degree or college credits toward a degree - a great way to begin the college experience!

[ECP at OBHS PowerPoint](#)  
[ECP Four Year Course Plan](#)

Students interested in applying for this program should submit an application to their OBHS counselor by April 1, 2023. **Appendix D**

*In New Jersey, by law, public colleges are required to accept associate degrees for related programs. Most colleges across the country may accept up to sixty transfer credits. All colleges reserve the right to accept dual enrollment college credits. If a student plans to attend a four-year university, it is strongly recommended that the student contacts the university of intent to inquire about dual credit courses that will be considered for acceptance.*

### **Middlesex College Dual Enrollment**

The Dual Enrollment program provides high school students the opportunity to earn both high school and college credit while still being enrolled in high school. These courses have been approved by Middlesex College and will be directly taken at OBHS.

- Students may take the dual-enrollment course for high school credit only.
- Students may pay the course tuition and receive both high school and college credit.
  - o **MCDE** is noted in the course description throughout this course offering book of all courses that are Middlesex College Dual Enrollment options.
  - o Course List below

Accounting III H	AP Chemistry	AP Art History
Child Development III H *	Organic Chemistry H	French IV H
AP Computer Science	AP Biology	AP French
AP English Literature	Anatomy and Physiology H	Italian IV H
Pre-Calculus Honors	AP US History	AP Italian
Calculus Honors	AP Psychology	Spanish IV H
Statistics & Analysis	AP US Government and Politics	AP Spanish
AP Statistics	AP European History	German IV H
AP Music Theory	AP World History	AP German

\*MC Prerequisite required

*In New Jersey, by law, public colleges are required to accept associate degrees for related programs. Most colleges across the country may accept up to sixty transfer credits. All colleges reserve the right to accept dual enrollment college credits. If a student plans to attend a four-year university, it is strongly recommended that the student contacts the University of intent to inquire about dual credit courses that will be considered for acceptance.*



### **Old Bridge High School Early Release/Late Arrival Privilege (Seniors Only)**

#### **Expectations and Understanding for Students Who Receive Early Release/Late Arrival**

Seniors who are in good standing may apply for late arrival and/or early dismissal for their senior year. Late arrival/early dismissal shall be a privilege. As such, it may be revoked at any time by administration for failure to remain in good standing and/or violations of school rules.

The following conditions will apply to receiving and retaining a late arrival/early dismissal:

Student is a member of the senior class and in good standing. Good standing shall mean the student:

- a. Is scheduled for four (4) classes plus English IV and Physical Education.
  - b. Is projected to meet all graduation requirements by the end of the current school year.
  - c. Is not at risk academically (i.e. passing all scheduled classes)
2. Students who are granted an early dismissal may not be on school property following their dismissal time without prior approval of administration. Seniors participating in after-school activities/athletics may return to the school property after the general dismissal time (2:06 pm), once the school buses have departed the property.
  3. Students who are granted Late Arrival must report to school each day early enough to check-in and arrive to their first scheduled class *on time*. Failure to do this may result in having this privilege revoked.
  4. Students understand that schedule changes will not be considered to accommodate Early Release/Late Arrival.
  5. **Students provide their own transportation to/from school.**
  6. Student athletes must meet the eligibility requirements of NJSIAA (i.e. pass all scheduled classes).

### **Course Placement Appeal**

Students and parents have the option to waive into honors and/or Advanced Placement course(s). The Course Appeal Application can be obtained from the School Counselor. Parent approval is required as described below:

- I hereby request that my child be placed in the course level listed below without meeting the Board of Education approved pre-requisites.
- I am aware that my child does not meet the rubric guidelines and pre-requisites for this course, based on prior grades and academic performance in the corresponding subject area.
- I understand that, if waiving to a higher level, the course is significantly more challenging than the recommended course. Honors and Advanced Placement Courses are much more rigorous than other courses and impose very significant reading responsibilities. The time commitment required of these courses is substantial, and students must consider this when requesting a course waiver.
- See Appendix B

### **GENERAL REQUIREMENTS FOR COLLEGE ENTRANCE**

As a basic guide for students and the parents of students who anticipate attending an institution of higher education following graduation from high school, we offer the following information. We would like to stress, however, that admission requirements vary considerably from college to college. Therefore, this information should be considered a guide only and is not presented to represent specific admission requirements to any college or university. Students planning to continue their education should consult the catalogs of those colleges they are interest in attending.

The majority of colleges and universities stress five major academic areas when considering a candidate for admissions. These areas are English, social studies, mathematics, science, and world language. Other subjects for which a high school gives credit are accepted in varying degrees, depending upon the college or university. Likewise, the type and number of elective credits allowed for admission will vary among the colleges or universities. A student's high school record is the most accurate and widely accepted indicator of future success in college. It cannot be stressed enough that this record begins freshman year. Developing solid and positive study habits, work attitudes, and class achievement is important for each of the student's four years in high school. Students learn, sometimes too late, that their underachievement in freshman year adversely affected their chance of acceptance to their first choice college.



Remember, college admissions officers consider many aspects of a student's personal and academic profile, including school records, SAT or other college entrance examination scores, student involvement in activities, community service, and other personal qualities and attributes. However, first and foremost in their decision-making process is the student's high school record. In general, the vast majority of colleges and universities **minimally require** at least 16 academic units:

- 2-3 years of a lab science
- 4 years of English
- 3 years of mathematics
- 3 years of social studies
- 2-3 years of a world language

In most cases, the more competitive or difficult admission is into a college or university, the more courses will be required in the above areas. Also, the more competitive colleges and universities might require SAT II Exams. Parents and students should examine the need to take these exams early in a student's academic career. Guidance personnel are familiar with the college application process and are ready to help students engage the process. Ask questions early in your high school journey so as not to be closed out of consideration as a senior because you do not have all of the requirements necessary for acceptance into the college or university of your choice.

### **NAVIANCE**

Naviance Student is a mobile-friendly website that you can use to plan for college and a career. Naviance Student is linked with Naviance™, a service that we use in our office to track and analyze data about college and career plans, so it provides up-to-date information that is specific to our school.

Naviance Student allows you to:

- Get involved in the planning and advising process – Build a resume, complete online surveys, and manage timelines and deadlines for making decisions about colleges and careers
- Research colleges – Compare GPA, standardized test scores, and other statistics to actual historical data from our school for students who have applied and been admitted in the past
- Research careers – Research hundreds of careers and career clusters, and take career assessments
- Create future plans – Create goals and to-dos, and complete tasks assigned to you by the school to better prepare yourself for your future college and career goals

Naviance Student also lets us share information with you about upcoming meetings and events, local scholarship opportunities, and other resources for college and career information. You can also use the site to stay in communication with the counseling office.

***You will be provided with a personal access code and instructions for accessing Naviance Student. You will use that code to create your own Naviance Student account. See Ms. Grace Patella in Guidance to register you.***

### **USING THIS BOOKLET**

This publication is organized into areas of academic and elective disciplines. At the beginning of each field of study, all course titles are listed according to the year(s) in which they are available for student selection. Following that, each course offered under said field of study is presented. The course title and course number (necessary for official reference only) appear in bold face type. While the vast majority of courses listed are for five (5) credits, it should be noted that certain advanced placement courses are ten (10) credits. Certain semester-length courses are two and one-half (2.5) credits.

Each course also will indicate prerequisites and co-requisites. A brief description of the course content, requirements, level of expectations, and other interesting facts about the course is included. These descriptions are designed to help students and parents match the content of the course with the interest of the student. Once you have reviewed the booklet, please note any questions that you still have and bring them, either in person or via the telephone, to the Guidance Department. One of our knowledgeable and helpful staff members will be more than happy to assist you. The Board of Education, the administration, and the staff wish you success here at OBHS.



# ENGLISH

## **GRADE 9**

English I CP  
English I Honors  
Speech and Drama I  
Journalism I  
Video and Media Production I  
Yearbook I

## **GRADE 10**

English II CP  
English II Honors  
Speech and Drama I  
Speech and Drama II  
Video & Media Production I  
Journalism I  
Journalism II  
Yearbook I  
Yearbook II  
Minority Literature/  
Creative Writing  
Mythology, Science Fiction & Fantasy  
Literature  
Film Studies

## **GRADE 11**

English III CP  
English III Honors  
AP English Composition  
Speech and Drama II  
Studio Drama  
Video & Media Production I  
Video & Media Production II  
Film Studies  
Journalism I  
Journalism II  
Yearbook I  
Yearbook II  
Mythology, Science Fiction, and Fantasy Literature  
Creative Writing/  
Minority Literature

## **GRADE 12**

English IV CP  
English IV Honors  
AP English Literature  
Speech and Drama II  
Studio Drama  
Video & Media Production II  
Film Studies  
Journalism I  
Journalism II  
Yearbook II  
Mythology, Science Fiction, and Fantasy Literature  
Creative Writing/  
Minority Literature



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**ENGLISH**


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The courses in the English Department are organized to meet the criteria of the New Jersey Student Learning Standards and are created to ensure the success of every graduate of Old Bridge High School.

**ENGLISH I COLLEGE PREPARATORY (7201) Grade 9 5 Credits**

**Prerequisite:**

- Successful completion of grade 8 English

Following a review of skills learned in middle school, English I CP students will be introduced to the high school English program. Emphasis will be placed on students developing analytical skills and written and oral expression through the study of literature. As an integral part of the year's work, there will be an introduction to research procedures culminating in a research project. All English I CP students will be exposed to a core body of knowledge including an anthology, formal and informal essays, creative writing, vocabulary lists, and study skills. Titles in the study of literature will include *Of Mice and Men*, and Shakespeare's *Romeo and Juliet*. In addition, students will cover an interdisciplinary thematic unit with content covered in world history, such as Greek and Roman mythology. Examples of art and music representative of the period will be included.

**ENGLISH I HONORS (7211) Grade 9 5 Credits (Honors)**

**Prerequisite:**

- Minimum final grade average of 95 in grade 8 English or 88 in grade 8 English Honors

In addition to the requirements for English I CP, honors students will be required to read other selected literature from the grade level anthology; Shakespeare's *Midsummer Night's Dream*, and other selected novels. Advanced writing assignments and literary research will be required.

**ENGLISH II COLLEGE PREPARATORY (9206) Grade 10 5 Credits**

**Prerequisite:**

- Successful completion of English I

The sophomore year English program is devoted to exploring various genres of literature, (e.g., short stories, novels, plays, and poetry). In addition, sophomore year is one of preparation for the HSPA and SAT. All English II College Preparatory students will be exposed to a core body of knowledge including an anthology, vocabulary lists, the five-paragraph essay, a research paper, and preparation for the HSPA. Core titles in the study of literature will include *Lord of the Flies*, Shakespeare's *Othello* or *Julius Caesar*, and *The Bad Seed*.

**ENGLISH II HONORS (9207) Grade 10 5 Credits (Honors)**

**Prerequisite:**

- Minimum grade of B- in English I Honors or A- in English I CP

In addition to the requirements for English II CP, Honors students will study *1984* and *Much Ado About Nothing*. Honors students will be responsible for additional vocabulary and prepare a research paper on a topic related to literature.

**ENGLISH III COLLEGE PREPARATORY (9211) Grade 11 5 Credits**

**Prerequisite:**

- Successful completion of English II

English III examines the study of American literature from the Colonial period to the present. All English III students will be exposed to a core body of knowledge including a grade level vocabulary text, the basics of a research paper, and an intensive preparation for the HSPA. Core titles in the study of American Literature will include Death of a Salesman, The Great Gatsby, The Crucible, and Farewell to Manzanar. In addition to American literature selections, students will be required to read Tuesdays with Morrie.



**ENGLISH III HONORS (9212) Grade 11 5 Credits (Honors)**

**Prerequisite:**

- Minimum grade of B- in English II Honors or A- in English II CP

In addition to the requirements for English III CP, Honors students will be required to read American Literature such as The Adventures of Huckleberry Finn and/or The Red Badge of Courage, and The Scarlet Letter. Students will be required to write two critical analyses papers and one literary research project.

**AP ENGLISH LANGUAGE AND COMPOSITION (9213) Grade 11 5 Credits (AP)**

**Prerequisite:**

- Minimum grade of B in English II Honors or A in English II CP

Advanced Placement English Language and Composition is an introductory college-level writing/composition course. Students will participate in numerous scholastic activities that will cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situation, claims and evidence, reasoning and organization, and style. The course is in alignment with the Advanced Placement Curriculum offered through the College Board. *Advanced Placement students are required to complete a summer reading assignment that will be assessed upon return to school.*

**ENGLISH IV COLLEGE PREPARATORY (9216) Grade 12 5 Credits**

**Prerequisite:**

- Successful completion of English III

The senior year is devoted to a study of the origins of the English language and a chronological study of major British writers within the historical, social, and philosophical movements of their time. Writing and speaking skills, SAT preparation, college application writing, and study skills for college will be emphasized. All English IV students will be exposed to a core body of knowledge, including grade level vocabulary and written analyses and oral reports for each major literary period in British literature. Core titles in the study of British literature will include the Anglo-Saxon epic poem Beowulf; major pieces from the Medieval and Renaissance periods studied are “The Canterbury Tales”, “Sir Gawain and the Green Knight”, Shakespeare’s “*Macbeth*” and selected works from modern literature such as Elie Wiesel’s “Night”.

**ENGLISH IV HONORS (9217) Grade 12 5 Credits (Honors)**

**Prerequisite:**

- Minimum grade of B- in English III Honors or A- in English III CP

The English IV Honors Program is devoted to a chronological study of world literature with emphasis on the epic literature of various nations and cultures. Core titles include *The Epic of Gilgamesh* and *The Iliad*, *The Inferno*, *Perceval*, and *The Misanthrope*. During the 2<sup>nd</sup> half of the school year, students will read selected works from British literature including works from the Anglo-Saxon Medieval and Renaissance periods. Students will read Shakespeare’s *Macbeth*, and selected modern dramas. Students are required to write critical analyses, a literary/historical research paper and college essays.

**AP ENGLISH LITERATURE AND COMPOSITION (9218) Grade 12 5 Credits (AP)**

**Prerequisite:**

- Minimum grade of B in English III Honors or A in English III CP or B- in AP English Composition

AP English Literature and Composition is a high-level course in which students develop their close reading, logical writing, critical thinking, and public speaking skills through an extensive curriculum. Students analyze poetry and prose, recognize the impact of literary devices, actively participate in classroom discourse, and write literary analysis essays. *A mandatory summer reading assignment requires students to read and write analytically on two classic novels, a poem, and supplementary readings. The summer assignment serves as a foundation for a significant portion of the first marking period as well as yearlong references to these works.* AP English Literature and Composition is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.



**SPEECH AND DRAMA I (8220-9220) Grades 9-10 5 Credits**

Speech and Drama I is designed to develop effective verbal and nonverbal communication skills. This course provides the experience needed to build self-confidence when speaking before an audience. Students will learn how to prepare and deliver short talks and more formal speeches. This course exposes students to the history and structure of drama, the fundamentals of acting, improvisation, character development, scene study, and technical theatre.

**SPEECH AND DRAMA II (9221) Grades 10-12 5 Credits**

**Prerequisite:**

- Speech and Drama I

Speech and Drama II is a performance course that covers all elements of production including directing, acting, set design, props, costumes, and lighting. Students are required to participate in the production of one-act plays that are performed for assemblies in the high school and throughout the district. Students will continue to develop their acting skills through improvisation, theatre games, monologues, and scene work.

**STUDIO DRAMA (9222) Grades 11-12 5 Credits**

**Prerequisite:**

- Speech and Drama I and II

Studio Drama is a course in which students will read and study great plays from the Greeks through Shakespeare. For those students who qualify for the second year, dramas from the seventeenth century through the twentieth century will be studied. Scenes from these classics will be performed for the class and for outside audiences. Students will work on special projects of both a personal nature and community interest. Special emphasis will be placed on audition skills and performance of monologues. Students will have an opportunity to work on movement and voice and direct plays and scenes using members of the class as their actors. Field trips to regional and Broadway theaters will be part of this class experience.

**FILM STUDIES (9255) Grades 10-12 5 Credits**

This course is devoted to the study of the history and art of film and the analysis of great classics produced from the silent era to the present. Students will study story elements, film structure, American film history, and film genres. Students will be exposed to production aspects of film including screenplay, camera work, editing, lighting, color, sound, direction, and acting. Students will be required to write research papers and critical analyses of major films.

**VIDEO AND MEDIA PRODUCTION I (9230) Grades 9-11 5 Credits**

This course is designed to introduce the students to the importance of visual and electronic communications. A “hands-on” approach will enable students to become familiar with hardware and software related video and media production. Students will work on class projects as well as projects for the school community.

**VIDEO AND MEDIA PRODUCTION II (9231) Grades 10-12 5 Credits**

**Prerequisite:**

- Completion of Video and Media Production I

This course will focus on a “hands-on” approach to video and media production. Students will demonstrate an ability to understand and utilize advanced production equipment as well as select and operate the appropriate equipment for assigned projects. In addition, students will have the opportunity to explore careers in television production and related fields. Reading assignments, critiques, and performance assessments will be used to evaluate student performance. Students will be expected, at times, to work over and above the class period. Students will be expected to develop programming for the school’s weekly program, *The Knightly Wrap Up*

**JOURNALISM I (8235-9235) Grades 9-12 5 Credits**

**Prerequisite:**

- Students must have B- or better in previous English class.

Students will learn about the professions and procedures associated with Journalism, including photojournalism, preparing for and conducting interviews, background research, writing in the journalistic style, and engaging the intended audience. Students will gain practical, “hands-on” experience by writing, editing, and producing the online school newspaper, [Knight Life](#). Students will also learn about the ethical responsibility of a free press.



**JOURNALISM II (9236) Grades 10-12 5 Credits**

**Prerequisite:**

- Students must have completed Journalism I and/or have the journalism teacher's recommendation.

Students can receive credit for taking the course more than once. Students in Journalism II will assume primary responsibility to produce and edit the online student newspaper, Knight Life. Students in Journalism II will refine their photography, writing, editing, and communication skills as they apply to all aspects of newspaper production, including the opportunity to fill leadership positions on the staff. Students will also continue their studies of the ethical responsibility of a free press.

**YEARBOOK I (8240-9240) Grades 9-11 5 Credits**

This elective course focuses on the skills associated with the production of a yearbook. Emphasis is placed on legal and ethical issues, theme development, cover design, copy writing, caption writing, and photograph cropping. Students will be introduced to computer software used for publications and will have the opportunity to contribute to the yearbook for grades 9, 10 and 11.

**YEARBOOK II (9241) Grades 10-12 5 Credits**

**Prerequisite:**

- Publications I students who have received the Publications teacher's recommendation

This elective course centers on the production of the yearbook. Students work on layout, writing copy, placing copy, cropping photographs, writing captions, gathering news, and accomplishing those activities associated with the production of a publication. Students will incorporate computer software used to produce the yearbook. In order to meet deadlines, students may need to stay after school to complete certain projects. After school work is a must for editors.

**MYTHOLOGY, SCIENCE FICTION & FANTASY LITERATURE (9245) Grades 10-12 5 Credits**

This elective course gives students the opportunity to explore a body of science fiction, fantasy literature, and mythology that represents these genres at their best. Thematic units include the role of the heroic, the universality of the human condition, critiques of the values of man, and the potential loss of humanity in a world dominated by technology. Students will read and view world myths beginning with the first piece of recorded literature set in ancient Mesopotamia, contemporary science fiction set in the distant future, and fantasy literature set in other realms. Students will participate in discussions, creative activities, written responses, and research.

**CREATIVE WRITING (9250) Grades 10-11 2.5 Credits**

This one semester elective course is designed for students of all ability levels who wish to enhance their writing skills. Genres will include the autobiographical essay, expository composition, poetry, fiction, nonfiction, and dramatic writings. Students will be required to keep daily journals. This course is paired with Minority Literature.

**MINORITY LITERATURE (9446) Grades 10-12 2.5 Credits**

This one-semester elective course will expose students to different cultural perspectives. Students will explore the universal qualities of humanity, as well as the unique characteristics of American minority cultures. Students will read selections and view films as a class. Afterwards, students will respond through writing, group discussions, and individual, and group projects. This course is paired with Creative Writing.





# MATHEMATICS

## **GRADE 9**

Algebra I  
Algebra I Honors  
Geometry  
Geometry Honors  
Algebra II  
Algebra II Honors

## **GRADE 10**

Algebra I  
Geometry  
Geometry Honors  
Algebra II  
Algebra II Honors  
Pre-Calculus  
Pre-Calculus Honors

## **GRADE 11**

Geometry  
Algebra II  
Algebra II Honors  
College Algebra  
Introduction to Pre-Calculus  
Pre-Calculus  
Pre-Calculus Honors  
Calculus Honors  
AP Calculus AB  
AP Calculus BC  
Statistics and Analysis  
AP Statistics and Analysis

## **GRADE 12**

Algebra II  
Introduction to Pre-Calculus  
Pre-Calculus  
Pre-Calculus Honors  
Calculus Honors  
AP Calculus AB  
AP Calculus BC  
Statistics and Analysis  
AP Statistics and Analysis  
College Algebra  
Advanced Topics of Mathematics



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**MATHEMATICS**


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The courses in the Mathematics Department are organized to meet the criteria of the New Jersey Student Learning Standards for Mathematics and the National Council of Teachers of Mathematics Standards (NCTM) to ensure that every graduate of Old Bridge High School will have the opportunity to experience higher level mathematics. We have organized the courses so that students can take advantage of the current innovations in technology. Scientific and graphing calculators are used in all courses. Students completing the AP Calculus and/or AP Statistics course(s) will have specific preparation for the Advanced Placement Tests. Mathematically skilled students may take Geometry and Algebra II concurrently based on stringent prerequisites. Students who opt for this program may not drop Geometry and continue on with Algebra II. Students must remain in Geometry for the entire sophomore year.

**ALGEBRA I COLLEGE PREPATORY (7311, 9408)      Grades 9-10      5 Credits**
**Prerequisite:**

- Successful completion of Grade 8 Math

In this college preparatory program, students will do significant work on solving equations, inequalities, graphing lines, simplifying algebraic expressions and evaluating word problems. There also will be applications in statistics, probability, pure and applied math applications, geometry, and work with calculators. Applications will be used to develop and exemplify the algebra of equations and inequalities. Models for the four arithmetic operations will be studied and extended to expressions involving variables.

**ALGEBRA I HONORS (7321)      Grade 9      5 Credits (Honors)**
**Prerequisite:**

- Minimum grade of 95 in Grade 8 Math

This college preparatory program will include all topics described for the Algebra I course; however, it will be taught in greater depth and at a faster pace. Students will be expected to demonstrate more rigorous applications of Algebra I topics. Some Geometry and Algebra I concepts will also be introduced at this level. Students are expected to be self-motivated and capable of doing independent as well as group work.

**GEOMETRY COLLEGE PREPATORY (7333-9415)      Grades 9-11      5 Credits**
**Prerequisite:**

- Successful completion of Algebra I /Honors Grade 8 Math

**Co-requisite:**

- See Algebra II and/or Algebra II Honors for co-requisites

Geometry is the branch of math that enables students to see the connection between theory and the physical world. Therefore, the importance of models is stressed as a means of applying definitions, postulates, and theorems. Students further their development of skills in drawing, measuring, and visualizing points, lines, and planes. The realm of logic is explored by employing deductive reasoning techniques through an informal, sequential format of conclusions, substantiated by justifications. The incorporation of the study of transformations affords students the opportunity to integrate topics such as congruence and similarity along with the algebraic principles of ratio and proportion. The key emphasis is on application of practical problems. Today's advancements in technology are utilized, as calculators and computers are introduced as an integral part of problem solving. Additional topics covered include area, volume, coordinate geometry, and trigonometry.

**GEOMETRY HONORS (7343-9416)      Grades 9-10      5 Credits (Honors)**
**Prerequisite:**

- Minimum grade of B- in Algebra I Honors OR
- Minimum grade of A in Algebra I CP OR
- Minimum grade of 88 in Algebra I (Honors Grade 8 Math)

**Co-requisite:**

- See Algebra II and/or Algebra II Honors for co-requisites

Students learn to reason deductively in the formal or informal demonstration of proofs. The properties of plane and three-dimensional geometric figures are developed. Basic trigonometric functions and coordinate geometry are introduced. The student is also expected to derive and apply area and volume formula.



**ALGEBRA II COLLEGE PREPATORY**

**(9420)**

**Grade 9-12**

**5 Credits**

**Prerequisite:**

- Successful completion of Geometry

**Co-requisite:**

- Students who achieve a B in Algebra I Honors may take Algebra II concurrently with Geometry OR
- Students who achieve a minimum grade of 88 in Algebra I/Honors Grade 8 Math may take Algebra II concurrently with Geometry
- Students who achieve an A average or higher in Algebra I may take Algebra II concurrently with Geometry

This course logically follows the study of Algebra I and Geometry. It is intended for those students who have demonstrated a high degree of success in both Algebra and Geometry. Algebra II encompasses substantial amounts of Geometry, encouraging an integrated approach to problem solving activities. Students are expected to use current technology. Four dimensions of understanding are emphasized: skill in carrying out various algorithms; developing and using mathematical properties and relationships; applying mathematics in realistic situations; and representing or picturing mathematical concepts. Matrices, functions, trigonometry, polynomials and statistics are just a few of the topics studied.

**ALGEBRA II HONORS**

**(9421) Grades 9-11**

**5 Credits (Honors)**

**Prerequisite:**

- Minimum grade of A in Geometry and Algebra I or minimum grade of B- in Honors Geometry and Honors Algebra I
- Minimum grade of 88 in Algebra I/Honors Grade 8 Math

**Co-requisite:**

- Students who achieve an A in Algebra I Honors may take Algebra II Honors concurrently with Geometry Honors or Geometry CP OR
- Students who achieve a minimum grade of 95 in Algebra I/Honors Grade 8 Math may take Honors Algebra II concurrently with Honors Geometry or Geometry CP OR
- Students who achieve an A+ average or higher in Algebra I may take Algebra II Honors concurrently with Geometry Honors or Geometry CP

This course will teach algebraic methods and graphing techniques, with special emphasis on problem solving. Algebraic theory and proofs will be discussed as well as determinants, sequences, series, probability, permutations, and combinations. The concepts of trigonometry and its application to problem solving are introduced as time permits.

**COLLEGE ALGEBRA (9422)**

**Grades 11-12**

**5 Credits**

**Prerequisite:**

- Successful completion of Geometry

Students will gain a review of traditional Algebra I and Geometry concepts, focusing on algebraic skills. Topics studied will include polynomial, rational and exponential functions with an emphasis on solving equations and problem solving.

**INTRODUCTION TO PRE-CALCULUS (9423)**

**Grades 11-12**

**5 Credits**

**Prerequisite:**

- Minimum grade of C- in Algebra II

This is a transition course between Algebra II and Pre-Calculus intended for those students not yet ready for the rigors of Pre-Calculus. Students will reinforce their understanding of algebraic topics and expand their knowledge of trigonometric functions. These skills are necessary to be prepared for successful completion of Pre-Calculus



**PRE-CALCULUS (9425) Grades 10-12 5 Credits**

**Prerequisite:**

- Minimum grade of B- in Algebra II or minimum grade of C- in Algebra II Honors
- Minimum grade of B- Intro to Pre-Calculus

The emphasis in this course is on the transition from secondary to university level mathematics. The course begins with an in-depth study of trigonometry and extends the ideas of functions. The second phase of the course introduces, in some depth, the topics of probability and statistical analysis. Linear algebra is introduced through elementary operations with matrices. Throughout the course, emphasis is placed on developing symbolic manipulation skills, as well as examining alternative strategies for solving familiar problems. Students will be expected to demonstrate proficient problem-solving skills with and without calculators.

**PRE-CALCULUS HONORS (9426) Grades 10-12 5 Credits (Honors)**

**Prerequisite:**

- Minimum grade of B- in Algebra II Honors or minimum grade of A- in Algebra II

This course is part of the Middlesex Scholars Program with Middlesex County College. The course extends the content of pre-calculus in several areas. The transformation of trigonometric functions and the normal distribution in statistical analysis are investigated in greater depth. Sigma notation and inductive proofs are explored as an introduction to integration. Students at this level are expected to practice problem solving in a genuine sense and demonstrate reasonable comprehension of the reading material. Practice in symbolic manipulation is essential and will be emphasized throughout the course. Technology is available for use in analytic geometry, statistical analysis, and simulating experiments. Students will be expected to demonstrate proficient problem solving skills with and without calculators. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

**CALCULUS HONORS (9427) Grade 11-12 5 Credits (Honors)**

**Prerequisite:**

- Minimum grade of C- in Pre-Calculus Honors or minimum grade of B- in Pre-Calculus

This course is part of the Middlesex Scholars Program with Middlesex County College. It covers functions, limits, continuity, and the differential and integral calculus of algebraic, trigonometric, and other transcendental functions. Topics will include applications such as related rates, maximum-minimum problems, areas, and volumes. Students will use graphing calculators as an integral part of the instruction. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

**ADVANCED PLACEMENT CALCULUS AB (9430) Grade 11-12 5 Credits (AP)**

**Prerequisite:**

- Minimum grade of B- in Pre-Calculus Honors or minimum grade of A- in Pre-Calculus
- Students enrolled in AP Calculus AB cannot enroll in AP Calculus BC

This course is part of the Middlesex Scholars Program with Middlesex County College. It is an advanced mathematics course developed for the college-bound student who would like to take a calculus course and try to get college credit. Limits, differentiations, appreciations, integration, transcendental functions, and indeterminate forms will be covered. The derive computer software and/ or graphing calculator will be used in the class. Students will be prepared to take the AP Calculus AB exam.

**ADVANCED PLACEMENT CALCULUS BC (9431) Grade 11-12 5 Credits (AP)**

**Prerequisite:**

- Minimum grade of B in Pre-Calculus Honors or minimum grade of A in Pre-Calculus
- Students enrolled in AP Calculus BC cannot enroll in AP Calculus AB

This course is part of the Middlesex Scholars Program with Middlesex County College. It is an advanced mathematics course designed for those students who have excelled in mathematics and who want to major in a mathematical field in college. It includes all of the AP Calculus AB curriculum plus slope fields, convergence, divergence, infinite series, other coordinate systems, simple differential equations, and quadratic surfaces. Technology will also be used in the class. Students will be prepared to take the AP Calculus BC exam.



**STATISTICS AND ANALYSIS (9435)**

**Grades 11-12**

**5 Credits**

**Prerequisite:**

- Successful completion of Pre-Calculus or Pre-Calculus Honors or
- Minimum grade of C- in Advanced Algebra/Trigonometry or C in Algebra II

This course is part of the Middlesex Scholars Program with Middlesex County College. The course is designed for those who wish to study the content of the *AP Statistics and Analysis* course but do not necessarily want to take the AP examination. Students will be introduced to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include interpreting graphical displays, exploring bi-variate data, the normal distribution, sampling distributions, confidence intervals, and test of significance. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

**ADVANCED PLACEMENT STATISTICS AND ANALYSIS**

**(9436) Grades 11-12**

**5 Credits (AP)**

**Prerequisite:**

- Minimum of a B- in Pre-Calculus Honors or A- in Pre-Calculus

This course is part of the Middlesex Scholars Program with Middlesex County College. It is an advanced placement course for college bound who will be strongly recommended to take the Advanced Placement exam in the Spring. Significant time will be devoted to preparing students for the advance placement examination. Topics include interpreting graphical displays, exploring bi-variate data, the normal distribution, sampling distributions, confidence intervals, and tests of significance. Students will take a mid-term and their final exam grade will reflect the quality of their research project. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

**ADVANCED TOPICS OF MATHEMATICS: Discrete and Finite Math (9437)**

**Grade 12**

**5 Credits**

This elective course is intended to help students with understanding and interpreting mathematical topics to develop the quantitative reasoning skills necessary for college, career, and life. The goal of the course is to improve students' mathematical literacy so that they can use math more effectively in everyday life. The expected gained skills upon successful completion include strong critical and logical thinking, strong number sense, making sound basic financial decisions, interpreting statistical surveys, familiarity with probability, and understanding how mathematics is used to help study social issues.





# SCIENCE

## **GRADE 9**

Environmental Science  
Biology Honors  
AFJROTC Cultural Studies: An  
Intro to Global Awareness

## **GRADE 10**

Biology CP  
Biology Honors  
Earth Science CP  
Chemistry CP  
Chemistry Honors  
Astronomy  
AFJROTC Cultural Studies: An  
Intro to Global Awareness

## **GRADE 11**

Earth Science CP  
Anatomy and Physiology  
Anatomy and Physiology Honors  
Chemistry CP  
Chemistry Honors  
Organic Chemistry Honors  
Physics  
Physics Honors  
Marine Science CP  
Marine Science Honors  
Dynamics of Healthcare Honors  
AP Biology  
AP Chemistry  
Astronomy  
AFJROTC Cultural Studies: An Intro to Global  
Awareness

## **GRADE 12**

Earth Science CP  
Environmental Science  
Anatomy and Physiology  
Anatomy and Physiology Honors  
Chemistry CP  
Chemistry Honors  
Organic Chemistry Honors  
Physics  
Physics Honors  
Marine Science CP  
Marine Science Honors  
Medical Terminology- Honors  
AP Biology  
AP Chemistry  
AP Physics  
Astronomy  
Meteorology  
AFJROTC Cultural Studies: An Intro to Global  
Awareness  
Renewable Energy and the Environment



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**SCIENCE**


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The Science Department provides students a wide variety of courses to select. Advanced Placement courses are offered in the disciplines of biology, chemistry, and physics. Honors level courses are offered in biology, chemistry, organic chemistry, physics, anatomy and marine science. Elective courses offered by the department include Anatomy and Physiology, Marine Science, Earth Science, Environmental Science, and Astronomy.

**ENVIRONMENTAL SCIENCE (7501) Grade 9 5 Credits**
**Prerequisite:**

- Successful completion of grade 8 science

This is a laboratory science designed for the average ability student who is interested in the interrelationship of the physical and biological aspects of our world. The course will cover and integrate topics of earth and space science, matter and energy cycles on earth, interactions of living things, Earth's energy needs and resources, and human interactions in the biosphere. Classroom activities stress inquiry-based learning and incorporate a variety of lab experiences and student project work.

**BIOLOGY HONORS (7521, 9607) Grade 9-10 5 Credits (Honors)**
**Prerequisites:**

- Minimum course grade of B- in Grade 8 Honors Science, or
- Minimum course grade of A in Grade 8 Science, or
- Minimum course grade of A- in Integrated Science CP

The program covers the major concept areas of modern biology including: evolution, biochemistry, bioenergetics, genetics, microbiology, and ecology. This course utilizes an instructional approach that emphasizes laboratory investigations, demonstrations, discussions, cooperative group work, individual participation, and independent study. The scope of the course includes an understanding of the structure, characteristics, and requirements for life the diversity of life and how it has occurred, the identification and analysis of systems, placing an emphasis on their components, an understanding of the environment as a system of interdependent components impacted by human activity and natural phenomena, the development of problem-solving, inquiry, and decision making skills, the ability to formulate usable questions and hypotheses from which experiments are planned and conducted, utilizing approved safe laboratory methods to provide data and results demonstrating scientific integrity and accuracy, and the inclusion of historical perspectives, scientific theory, skepticism, and a sharing of knowledge, ideas and beliefs through various means of communication.

**BIOLOGY CP (9606) Grade 10 5 Credits**
**Prerequisite:**

- Successful completion of one(1) year of high school science

Biology CP covers a broad range of pure and applied biological topics including: cell biology, biochemistry, biological diversity, genetics, and ecology. In this course, an emphasis is placed on laboratory investigations, demonstrations, discussions, and group and individual work. Study habits essential in post-secondary studies are utilized, developed, and refined.

**AP BIOLOGY (9608) Grades 11- 12 10 Credits (AP)**
**Prerequisites:**

- Minimum course grade of B- in Biology Honors or A- in Biology CP, and
- Minimum course grade of B- in Chemistry Honors or A- in Chemistry CP

Advanced Placement Biology is designed to be the equivalent of a college introductory biology course. The laboratory work will equate to the kinds of labs experienced by college students in an introductory course. The course will expose the student to the unprecedented explosion of knowledge in the areas of biology that are critical to the aspiring science student. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Curriculum content will follow the guidelines established by the National AP Biology Committee. Accordingly, three general areas will be covered: molecules and cells (25 %); genetics and evolution (25 %); and organisms and populations (50 %).



**CHEMISTRY CP (9616) Grades 10-12 5 Credits**
**Prerequisite:**

- Successful completion of Biology

There is a strong emphasis on laboratory work requiring the following: the utilization of problem-solving, inquiry, and decision making skills; the ability to formulate usable questions and hypotheses from which experiments are planned and conducted, utilizing approved safe laboratory methods to provide data and results demonstrating scientific integrity and accuracy; the ability to incorporate historical perspectives, scientific theory, skepticism, and a sharing of knowledge, ideas and beliefs through various means of communication. The scope of the course includes composition and properties of substances and mixtures, chemical reactions and bonding, periodic law and the periodic table of the elements, atomic theory, historical perspectives and subatomic organization, stoichiometry, the gas laws and behavior of gases, and acids, bases, titrations, and neutralization reactions. An oral presentation with visuals is required in the last marking period.

**CHEMISTRY HONORS (9617) Grades 10-12 5 Credits (Honors)**
**Prerequisites:**

- Minimum course grade of B- in Biology Honors, or
- Minimum course grade of A- in Biology CP

Chemistry Honors is intended for students who have shown a high proficiency in science and mathematics. During laboratory work, students are expected to demonstrate consistent use of significant figures and error analysis in data recording as well as the use of advanced cognitive skills and abstract reasoning during data interpretation. Though the topics of the course include those covered in Chemistry CP, the instructional approach is more rigorous and inductive in nature. The major concept areas include: composition and properties of substances and mixtures, chemical reactions and bonding, periodic law and the periodic table of the elements; atomic theory, historical perspectives and subatomic organization, stoichiometry, redox reactions, gas laws and behavior of gases introduction to organic chemistry; introduction to concerns in environmental chemistry (for example, the issue of acid rain related to chemical pollution), and acids, bases, pH, titrations, and neutralization reactions.

**AP CHEMISTRY (9619) Grades 11-12 10 Credits (AP)**
**Prerequisites:**

- Minimum course grade of B- in Chemistry Honors, or
- Minimum course grade of A- in Chemistry CP

The AP Chemistry course topics include atomic structure, chemical bonding, molecular geometry, equations and quantitative relations, gases, liquids and solids, solutions, electrochemistry, kinetics and equilibrium, thermodynamics, acids and bases, ionic equilibria, organic chemistry. This course also includes review and preparation for the Advanced Placement Chemistry Exam. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

**PHYSICS (9625) Grades 11-12 5 Credits**
**Prerequisites:**

- Successful completion of Chemistry Honors or Chemistry CP, and
- Successful completion of an Algebra II course

This course is designed for the inquisitive student who desires to know and understand the physical world in which he/she lives and desires to develop an ability to analyze critically and synthesize logically. The course of study is equally applicable to the scientist and humanitarian. Due to the nature of the material under study, course work includes laboratory investigations and problem solving. Topics include concepts of motion, motion in the heavens, mechanics, light, electromagnetism, models of the atom, and nuclear structure.



<b>PHYSICS HONORS</b>	<b>(9626)</b>	<b>Grade 11-12</b>	<b>5 Credits (Honors)</b>
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**Prerequisites:**

- Minimum course grade of B- in Chemistry Honors, or
- Minimum course grade of A- in Chemistry CP, and
- Successful completion of an Algebra II course

This is an accelerated full-year introductory physics program designed for the mathematically and scientifically oriented student. A strong emphasis is placed on analytical thought and problem solving. Topics taught include: the nature and cause of motion, resolution and composition of forces, curvilinear and harmonic motion, conservation of energy and momentum, thermodynamics, dynamics, mechanical waves, geometric and physical optics, and electromagnetic theory. Attention will also be given to special relativity, alternating current theory, and electronic devices.

<b>AP PHYSICS C</b>	<b>(9627)</b>	<b>Grade 12</b>	<b>10 Credits (AP)</b>
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**Prerequisites:**

- Minimum course grade of B- in Physics Honors, or
- Minimum course grade of A- in Physics, and
- Concurrently taking either AP Calculus or Calculus Honors

The AP Physics course ordinarily forms the first part of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. The sequence is parallel to or proceeded by mathematics courses that include calculus. Methods of calculus are used wherever appropriate in formulating physical principles and in applying them to physical problems. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus. The course is the first part of a sequence which in college is sometimes a very intensive one-year course but which usually extends over one and one-half to two years. **COMPLETION OF A SUMMER ASSIGNMENT IS REQUIRED.**

The AP Physics course topics include mechanics, electricity, magnetism, kinetic theory, thermodynamics, waves, optics, and modern physics. This course also includes review and preparation for the Advanced Placement Physics Exam. Colleges may grant credit to students whose scores indicate mastery of the content. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

<b>ORGANIC CHEMISTRY HONORS</b>	<b>(9618)</b>	<b>Grades 11-12</b>	<b>5 Credits (Honors)</b>
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**Prerequisites:**

- Minimum course grade of B- in Chemistry Honors, or
- Minimum course grade of A- in Chemistry CP, and
- Successful completion of Algebra II course

Organic Chemistry Honors is a second year of chemistry for students who have an interest and ability in chemistry or related science areas. The course involves the study of the structure, properties, and chemical behavior of carbon-containing compounds, including, among others, hydrocarbons, alcohols, plastics, and fuels. Laboratory experiments are performed. This course is excellent preparation for college biology, freshman college chemistry, and college organic chemistry. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

<b>EARTH SCIENCE CP</b>	<b>(9611)</b>	<b>Grades 10-12</b>	<b>5 credits</b>
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**Prerequisite:**

- Successful completion of Biology CP or Integrated Science CP

The topics to be studied include geology, meteorology, oceanography, astronomy, and space science. Students who may have an interest in any of these fields of study are encouraged to enroll. This course does require basic mathematics skills such as interpreting data from graphs, recording data in scientific form, using the metric system for measurement, and using scientific notation when required.



**MARINE SCIENCE CP (9630) Grade 11-12 5 Credits**

**Prerequisite:**

- Successful completion of Biology CP

There are several autumn and spring curriculum-required field trips to various marine environments. The emphasis in Marine Science CP is placed on student awareness and relationships involving the interaction of our environment and the sea. Topics will include: invertebrate and vertebrate life forms in various marine habitats, the physical and geological aspects of oceans and shorelines, weather and its effect on oceans, the chemistry of marine environments, and environmental concerns. Students will be encouraged to develop an understanding of the impact of the marine surroundings that influence daily life. Conducting both a comprehensive study of local marine environments and supervised dissections are integral parts of the program. Previous coursework in Chemistry is also suggested.

**MARINE SCIENCE HONORS (9631) Grades 11-12 5 Credits (Honors)**

**Prerequisites:**

- Minimum course grade of B- in Chemistry Honors, or
- Minimum course grade of A- in Chemistry CP

Marine Science Honors is intended for students who have demonstrated success in previous science and mathematics courses. Conducting both a comprehensive study of local marine environments, and supervised dissections are integral parts of the program. There are several autumn and spring curriculum-required field trips to various marine environments. The course will cover the same material as Marine Science CP but will entail a more in depth study of topics and an emphasis on the development of research and laboratory skills.

**ANATOMY AND PHYSIOLOGY (9632) Grades 11-12 5 Credits**

- **Prerequisite:** Successful completion of Biology CP

Anatomy and Physiology is a laboratory course that provides students with the fundamental concepts of the function and structure of the human body. It is designed to help meet the individual needs of students in preparation for further education in allied health professions/medicine and biological sciences. Supervised dissections and relevant laboratory experiences will be included with a focus on inquiry-based learning activities.

**ANATOMY AND PHYSIOLOGY HONORS (9633) Grades 11-12 5 Credits (Honors)**

**Prerequisites:**

- Minimum course grade of B- in Biology Honors, or
- Minimum course grade of A- in Biology CP, or
- Minimum course grade of B- in AP Biology

Anatomy and Physiology Honors is intended for students who have demonstrated success in previous science and mathematics courses, as well as an interest in continuing with post-secondary studies in health-related careers or biological science. This is an accelerated full-year introductory program designed to provide students with theoretical and practical knowledge and experience with the fundamental concepts of the function and structure of the human body systems. Supervised dissections, relevant laboratory experiences, field trips for enrichment and an end of year project are included within the instructional aspects of the course. The course will cover the same material as Anatomy and Physiology but will entail a more inquiry-based, in-depth study of the topics and an emphasis on the development of research and laboratory skills. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

**ASTRONOMY (9634) Grades 10-12 5 Credits**

The Astronomy course is designed as a full-year science elective for students who have previously demonstrated success in the disciplines of science and mathematics. The course incorporates strategies and authentic experiences that facilitate learning for diverse learners with an emphasis on practical application, skill development, and profound understanding of content while strengthening the ability to reason, write and problem solve in areas related to science and technology. Students will learn about the role that the universe plays in their daily lives. This course will compare and contrast current scientific theories to explain the existence of the universe to the theories relating to its ultimate fate. The composition, development, characteristics, features and evolution of all astronomical objects, as well as their effects on each other, will be included within the curriculum. Past, present, and future space programs and their contributions to everyday life will be explored and discussed.



**METEOROLOGY**
**(9635)**
**Grades 12**
**5 Credits**

The Meteorology course is designed as a full-year science elective for students who have previously demonstrated success in other science courses. The course incorporates practical applications, technology-based learning and skill development to facilitate learning for a diverse community. Students will learn about the structure of our planet's atmosphere, the transfer of heat through the troposphere, weather patterns, global wind, and forecasting. Students will conduct case studies on famous storms and learn the processes involved in severe weather formation, forecasting and storm safety. Students will understand the science behind climate change and the role humans play in causing it. Students will learn the role of technology and the future of weather forecasting.

**RENEWABLE ENERGY AND THE ENVIRONMENT**
**(9636)**
**Grades 11-12**
**2.5 Credits**

This one semester course provides an overview of society's energy needs, current energy sources, the developing and emerging renewable energy sources, and their economic and societal implications. There is a growing sense of national and global urgency regarding carbon and climate change with particular emphasis on our energy system. Unfortunately the answers are not simple. In this course, students explore our wide range of traditional and renewable energy sources and how these options impact our environment and society. Students are also exposed to the complex and compelling ethical issues raised by global, national, and local changes in how we produce and use energy. This course informs and engages students to be thoughtful, rather than passive, consumers of energy. Student gain the knowledge necessary to be articulate in career, community, and personal arenas regarding renewable energy resources. In addition, students develop the ability to evaluate and respond to present and future technological changes that impact their energy use in the workplace, at home, and in the community.

**DYNAMICS OF HEALTHCARE IN SOCIETY HONORS (9047) Grades 11 5 Credits (Honors)**

Dynamics of Health Care in Society is the first level course as part of the Health Science Careers Program offered by Rutgers School of Health Professions (SHP). Dynamics of Health Care in Society provides students an orientation to health care services and their delivery. It presents an interdisciplinary perspective, focusing on process skills such as critical thinking, ethical reasoning, and effective communications. The goal of this course is to orient students to health care, services and their delivery. Students will have the opportunity to earn three college credits by passing the Dynamics in Healthcare in Society exam in May.

**MEDICAL TERMINOLOGY HONORS (9046)**
**Grades 12**
**5 Credits (Honors)**

Medical Terminology is the second course offered as part of the Health Science Careers Program offered by Rutgers School of Health Related Professions. Medical Terminology is a course that offers students the opportunity to learn medical terms that is an important part of preparing for a health occupation career. It is the study of words that pertain to body systems and the anatomy and physiology, medical processes and procedures and a variety of diseases. This course will enable the student to build a solid foundation of commonly used elements that are essential for understanding the terminology of medicine and health. Students will have the opportunity to earn three college credits by passing the Medical Terminology exam in May.



### **AIR FORCE JUNIOR ROTC PROGRAM 2023-2024**

Air Force Junior ROTC (Reserve Officer Training Corps) is a four-year program of aerospace science academics and leadership/management instruction, intended to build better citizens for America. All AFJROTC courses are full year five credit electives, selected just like other elective courses. Although they require no pre-requisites to enroll, AFJROTC courses may not be taken concurrently. As a result, only one major course will be offered each academic year, so that the entire AFJROTC curriculum will be completed during a student's four-year high school experience and will be offered in the school year indicated next to each course name. The criteria for determining eligibility to participate in Air Force Junior ROTC are:

- Be enrolled in and attending a regular course of instruction in grades 9 through 12 at a school hosting the unit.
- Be selected by the Air Force Junior ROTC instructor with the approval of the school principal or his/her representative.
- Maintain acceptable standards of academic achievement and an academic standing that warrants at least normal progression leading to graduation.
- Maintain acceptable standards of conduct.
- Comply with specified personal grooming standards. Common sense and good judgment apply to the attainment of these standards. Standards will not be relaxed so as to reflect disgrace on the United States Air Force.

Students enrolling in AFJROTC may be subject to an interview with senior cadets and/or program instructors. Students unable or unwilling to comply with uniform wear, grooming, or conduct aspects of the program may face involuntary dismissal from program. Certificates of completion are awarded to cadets upon graduation, confirming the number of years participating. Uniforms, textbooks and curriculum guidance are provided by the Air Force at no cost to the student. (**Exception:** While uniforms are issued to students at no cost, maintenance of the uniforms is the student's responsibility. The Air Force JROTC uniform requires periodic dry cleaning to assure proper appearance and wear. Additionally, students are given an AFJROTC polo shirt. When students wear the polo shirt, it is required that they wear khaki pants as well.) The program is voluntary and incurs NO military obligation. For those students electing military service through one of the military academies, college ROTC, or enlistment, the following benefits are available upon completion of the four-year program:

1. Opportunity for special appointments to the United States Air Force Academy (and increased potential for acceptance to other service academies).
2. Increased opportunities for ROTC college scholarships.
3. Enlistment in the Army, Navy, Marine Corps or Air Force at a higher enlisted grade.

Students may also elect to participate in a voluntary summer leadership program, normally held at an active duty military installation. Here, students may refine their leadership, management, and military skills in a concentrated environment with cadets from other local high schools. Students can earn 2.5 hours of elective credit (*but will not receive quality points toward their GPA*) for participating in this eight (8) day encampment, normally held in late June.

#### **MISSION**

The mission of the AFJROTC program is to "Develop citizens of character dedicated to serving their nation and community."

#### **GOALS**

The goals of the AFJROTC program are to instill:

- The values of citizenship,
- Service to the United States,
- Personal responsibility, and
- A sense of accomplishment.

#### **OBJECTIVES**

The objectives of AFJROTC are to educate and train students in citizenship and life skills; promote community service; instill a sense of responsibility; and develop character and self-discipline through education and instruction



in air and space fundamentals and the Air Force's core values of "Integrity First, Service Before Self and Excellence In All We Do."

This program will enable the students to:

- Develop a high degree of strong morals, self-esteem, self-reliance, personal appearance, and leadership.
- Adhere to the values of integrity, service, and excellence.
- Increase their understanding of patriotism and responsibilities as US citizens.
- Participate in community service activities.
- Expand their skills of critical thinking and problem solving, communication and collaboration, and creativity and innovation.
- Demonstrate military customs, courtesies, and traditions and develop habits of order, discipline, and social skills.
- Acquire a broad-based knowledge of aerospace studies and leadership education.
- Strive to graduate from high school and prepare for college and careers in the 21st century.
- Cultivate a commitment to physical fitness and a healthy lifestyle.

### **ACADEMIC PROGRAM**

AFJROTC designed as a four-year program for high school students, however, students may participate in JROTC at any time and for any duration. The curriculum includes Aerospace Science (AS), Leadership Education (LE) and Wellness. All students will be given credit towards graduation for successful completion of the AFJROTC program per the Air Force School Agreement. Each academic course must consist of an AS component, an LE component, and a Wellness component, except in Aviation Honors Ground School classes, and stand-alone drill courses.

#### **Aerospace Science (AS)**

AS acquaints students with the elements of aerospace and the aerospace environment. It introduces them to the principles of aircraft flight and navigation, the history of aviation, development of air power, contemporary aviation, human requirements of flight, cultural and global awareness, geography, the space environment, space programs, space technology, rocketry, propulsion, the aerospace industry, and survival.

#### **Leadership Education (LE)**

LE is the portion of the AFJROTC curriculum that develops leadership skills and acquaints students with the practical application of life skills. The leadership education curriculum emphasizes discipline, responsibility, leadership, followership, citizenship, customs and courtesies, cadet corps activities, study habits, time management, communication skills, career opportunities, life skills, financial literacy, management skills, and drill and ceremonies.

#### **Wellness Program**

Wellness is an official and integral part of the Air Force Junior ROTC program. The objective of the Wellness Program is to motivate cadets to lead healthy, active lifestyles beyond program requirements and into their adult lives. For classes awarding elective or PE credit for AFJROTC courses, 20% of available contact time must be devoted to Wellness instruction.

### **AEROSPACE SCIENCE (AS) COURSES**

**Aerospace Science 220: An Introduction to Global Awareness, 2nd Edition (2023-2024)** The contents of this course have been completely rewritten and are structured around the Twelve Domains of Culture model developed by the Air Force Culture and Language Center (AFCLC). The cultural domains in this model include family and kinship, political and social relations, sex and gender, economics and resources, sustenance and health, technology and material, religion and spirituality, aesthetics and recreation, language and communication, time and space, history and myth, and learning and knowledge. This new course provides students with up-to-date information on exploring the concept of global awareness and the cultures of other regions throughout the world. It starts with an introduction of what global awareness is and the effects of technology on global culture. Students are then taken on a journey around the world, through different cultures in the Middle East, Asia, Africa, Latin America, Europe, and Australia. Finally, the students will be provided cultural information regarding Canada and Mexico.

**Aerospace Science 100: Milestones in Aviation History 2nd Ed. (2024-2025)** This is the recommended first AS course for all new cadets. It is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations and flight, then progresses through time to future developments in aerospace, with an introduction into cyber technologies. The intent of this textbook is to bring alive the significant discoveries in flight a reality. This book tells the story of why we are so proud of our Air Force heritage — laying the



foundation for future Air Force JROTC aerospace science courses. Throughout the course 21st -century learning is adopted with readings, video clips, hands-on learner centered activities, and chapter project-based learning opportunities.

**Aerospace Science 200: The Science of Flight: A Gateway to New Horizons Note: (2025-2026)** (This textbook is currently under revision) The Science of Flight: A Gateway to New Horizons is an introductory course and customized textbook that focuses on how airplanes fly, how weather conditions affect flight, and the human body, and flight navigation. The course is designed to complement materials taught in math, physics, and other science-related courses and is aligned with the National Science Education Standards, the Math Standards and Expectations, and ISTE National Educational Technology Standards for Students. In this course, every lesson includes a “Quick Write” and a short story related to the lesson; a lesson; a “Learn About” that tells students what they’ll learn from the lesson; a list of vocabulary words in the lesson; “Wing Tips” that highlight specific and interesting facts; and facts; and many biographies and profiles. Each lesson closes with “Checkpoints” that will allow students to review what they have learned. An “Applying Your Learning” section at the end of each lesson presents discussion questions that will give them a chance to use what they have learned and provides another way to reinforce their understanding of the lesson’s content. The text has four chapters, each of which contains a number of lessons.

**Aerospace Science 300: Exploring Space: The High Frontier 2nd Edition (2026-2027)** Aerospace Science 300: Frontier Second Edition is typically the third/fourth-year science course in the high school sequence of Aerospace Science courses for the Air Force Junior ROTC. This course has been completely rewritten to include the latest information and teaching philosophies, incorporating 21st-century learning strategies. This new course provides students with the latest information on exploring space and an introduction to cybersecurity and technology. It begins with early astronomy and the basic interest in the universe from the Greeks through the Renaissance and Enlightenment ages. Students will be provided an in-depth view of the solar system, including Earth, the Sun, the Moon, and planets. The text also discusses the history of space travel and more modern space probes and robotics. Students will examine the effects of space on the human body. The text also investigates the history of rockets, launch vehicles, and the coordinated systems required for a successful launch into space. Finally, the text will offer a cybersecurity chapter that outlines the importance of cybersecurity in space and in daily life.

**Optional Course-Aerospace Science 410: Survival: Survive • Return Note:** This curriculum is currently under revision. The Survival text is a synthesis of the basic survival information found in Air Force Regulation 64-4 Survival Training. The survival instruction will provide training in skills, knowledge, and attitudes necessary to successfully perform fundamental tasks needed for survival. Survival also presents “good to know” information that would be useful in any situation. The information is just as useful to an individual lost hunting or stranded in a snowstorm.

## **LEADERSHIP EDUCATION (LE) COURSES**

**Leadership Education 400: Fundamentals of Management (2023-2024)** Fundamentals of Management is a customized course designed for the fourth-year Junior Reserve Officer Training Corps (JROTC) cadet. Its aim is to provide you an introduction to basic management concepts and skills, especially as they relate to managing in a JROTC unit. Along the way you will learn some of the history of management studies and encounter elements of more-recent management research.

**Leadership Education 100: Traditions, Wellness, and Foundations of Citizenship (2024-2025)** LE 100 is the component of JROTC leadership education. It is intended for students who are entering the AFJROTC program and beginning their high school studies. It introduces cadets to history, organization, mission, traditions, goals, and objectives of JROTC for all services. It also introduces key military customs and courtesies, describes how to project a positive attitude, and examines the principles of ethical and moral behavior. It provides strategies for effective note-taking and study skills for academic success. Lessons cover how to be emotionally, mentally, and physically healthy. Avoiding and preventing violence in today’s society will also be covered. Recognizing types of bullying and how to advocate for prevention of this type of behavior. It covers healthy living, physical fitness, and how to make safe, drug-free, and responsible decisions. This textbook also examines the negative effects of air and water pollution, and how to help keep the environment safe. Cadets will be introduced to civics and our national government, including a historical understanding of the American flag and other important national symbols. The final chapter covers how the US Constitution protects our rights and freedoms as American citizens



**Leadership Education 200: Communication, Awareness, and Leadership 2nd Ed. (2025-2026)** Leadership Education 200: Communication, Awareness, and Leadership, Second Edition, is a customized course designed to improve communication, enhance awareness of self and others, and provide fundamentals of leadership and followership. The course focuses on the AFJROTC mission to “develop citizens of character dedicated to serving their nation and community.” Woven throughout is the underlying theme of developing personal integrity. The course also emphasizes leadership and values such as service and excellence. This update incorporates 21st -century teaching, learning, and skills of critical thinking, communication, collaboration, and creativity.

**Leadership Education 300: Life Skills and Career Opportunities (2026-2027)** Leadership Education 300: Life Skills and Career Opportunities, Second Edition provides an essential component of leadership education for today's high school students. This course it is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace of the 21st -century. Students will learn how to save, invest, and spend money wisely, as well as how to avoid credit traps. They learn about real-life issues such as contracts, leases, warranties, legal notices, personal bills, money-saving strategies for grocery shopping, apartment selection, and life with roommates. In addition, students learn how to select a school that is right for them; how to apply for admission to a vocational or technical school, community college, or college/university; and how to succeed in these learning environments. Information is provided on how to conduct the job search for students who wish to enter the workforce right after high school or after additional education and training. They learn how to prepare a winning résumé, and how to develop effective interviewing skills. The text also provides information on working for the federal government to include careers in the military, aerospace industry, and public service. Finally, students will consider the most important elements of life skills for all Americans: civic responsibilities, such as volunteering, registering to vote, jury duty, and draft registration.

### **WELLNESS**

Wellness is an official and integral part of the Air Force Junior ROTC program. It consists of two exercise programs focused upon individual base line improvements with the goal of achieving a national standard as calculated by age and gender. The Wellness curriculum is instrumental in developing citizens of character dedicated to serving our nation and communities. The program is provided as a tool to help students develop individualized training programs. Instructors are free to include other activities students enjoy such as team sports in order to keep the Wellness Program fun and motivating. The Wellness Program also provides a list of 19 exercises with examples that may be utilized in a program modifiable to meet individual goals. Instructors will utilize fitness programs that best fit the requirements within their program.



# ***SOCIAL STUDIES***

## **GRADE 9**

Global Studies Honors  
World History CP  
Civic Life, Liberty & the Pursuit of  
Happiness  
AP World History  
Sociology

## **GRADE 10**

AP U.S. History  
AP European History  
U.S. History I Honors  
U.S. History I CP  
Sociology

## **GRADE 11**

AP U.S. Government and Politics  
AP US History  
U.S. History II Honors  
U.S. History II CP  
Sociology  
Psychology  
AP Psychology  
AP European History  
Economics Honors

## **GRADE 12**

Economics Honors  
Sociology  
Psychology  
Conscience of Humanity  
International Studies Honors  
AP US History  
AP Psychology  
AP European History  
AP U.S. Government and Politics  
U.S. History II Honors  
U.S. History II CP



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**SOCIAL STUDIES**


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The courses in the Social Studies Department are aligned with the New Jersey Student Learning Standards and high school graduation requirements. A wide variety of comprehensive electives are also offered to junior and senior students. Today's students, more than ever before, need an understanding of the world's history and its people. Understanding the world's many cultures can contribute to fostering respect and civic participation. Advanced Placement courses enable the serious student to earn college credit upon successful completion of the AP exam.

**WORLD HISTORY CP (8701) Grade 9 5 Credits**

This course investigates the periods in history from late Medieval-Renaissance times to the present. Emphasis will be placed on the contributions of the past to our current culture. Attention is also paid to non-Western civilizations.

**GLOBAL STUDIES HONORS (8702) Grade 9 5 Credits (Honors)**
**Prerequisite:**

- Minimum final grade average of 95 in Grade 8 Social Studies or 88 in Grade 8 Social Studies Honors.

This course investigates the periods in history from late Medieval-Renaissance times to the present and includes an in depth historical analysis and interpretation. Exploring relationships between the past and present is a primary objective of this course. This course places major emphasis on historical research, historical issues-analysis, and decision-making and is for the serious student of social studies with excellent writing and research skills.

**CIVICS: LIFE, LIBERTY AND THE PURSUIT OF HAPPINESS (8705) Grades 9-12 2.5 Credits**

This course is high school level civics course that is a continuation and deeper study of the 8th grade social studies. The focus of the course is how the understanding and interpretation of the United States Constitution has evolved over the course of American history through specific case studies that had lasting effects on American society. In addition, students will understand the scope and content of the American criminal and civil law system. Course runs with Personal Finance.

**AP WORLD HISTORY (8705) Grade 9 5 Credits (AP)**
**Prerequisites:**

- Minimum must be enrolled in Grade 8 Social Studies Honors and in Grade 8 English Honors
- Minimum final grade average of 93 in Grade 8 Social Studies Honors and 93 in Grade 8 English Honors

Students in Advanced Placement World History must be strong writers who exhibit a strong desire to take both the Advance Placement Course and corresponding test. This course will cover all material necessary for student success on the Advanced Placement Examination from the origins of history to the Twenty-First Century. This course places major emphasis on historical issues-analysis and decision-making, and is for the serious student who wants to improve his/her academic abilities in a challenging educational environment. Students will be trained in test taking techniques for the Advanced Placement Test to enhance their chances of achieving success on the AP test. *Students will be required to complete a summer assignment prior to taking the course.* This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students three college credits upon completion of the course.

**U.S. HISTORY I CP (9711) Grade 10 5 Credits**
**Prerequisite:**

- Successful completion of World History CP

All Americans should know and appreciate our heritage. This chronological history of the United States is traced from the colonial days to the end of the 19th century. This course will give a better understanding of the sacrifices and struggles to attain and maintain the freedoms which we cherish.

**U.S. HISTORY I HONORS (9712) Grade 10 5 Credits (Honors)**
**Prerequisite:**

- Minimum grade of B- in Global Studies Honors, or an A- in World History CP.

All Americans should know and appreciate our heritage. This chronological history of the United States is traced from the colonial days to the end of the 19th century. This course will give a better understanding of the sacrifices and struggles to attain and maintain freedoms we cherish. Students will use multiple sources and be required to complete a variety of research projects with an additional emphasis on reading, writing and research skills.



**AP U.S. HISTORY (9713) Grades 10-12 5 Credits (AP)**

**This course is equivalent to US History I and US History II**

**Prerequisites:**

- For Grade 10 students, a minimum grade of B+ in Global Studies Honors or an A in World History CP
- For Grade 11 students, a minimum grade of an A in United States History I CP or an A- in US History I Honors.
- For Grade 12 students, a minimum grade of A in United States History II CP or A- in US History II Honors.

This course will fulfill the second year of United States History necessary to meet the New Jersey state high school graduation requirements.

This course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and issues in United States History. The chronological scope of this course is from the early foundations of our country to the present time. This course involves extensive historical research. Students who take this course should have excellent reading, writing, and research skills. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

**U.S. HISTORY II CP (9721) Grade 11-12 5 Credits**

**Prerequisite:**

- Successful completion of a U.S. History I course

This course will cover the chronological history of the United States from 1900 to the present time. Students will acquire a greater appreciation for the forces of historical change, which will give them a better understanding of the world in which they live. A variety of historical research projects will be required in this course.

**U.S. HISTORY II HONORS (9722) Grade 11-12 5 Credits (Honors)**

**Prerequisite:**

- Minimum grade of B- in US History I Honors or an A- in US History I CP.

This course will cover the chronological history of the United States from 1900 to the present time. Students will acquire a greater appreciation for the forces of historical change, which will give them a better understanding of the world in which they live. A variety of historical research projects will be required in this course. This course involves extensive historical research. Students who take this course should have excellent reading, writing, and research skills.

**AP GOVERNMENT AND POLITICS (9744) Grades 11-12 5 Credits (AP)**

**Prerequisites:**

- Minimum grade of B- in AP US History, or B in US History II Honors, or an A in US History II CP
- Grade 11 students only - Must enroll concurrently in AP Government and Politics and either US History II CP or US History II Honors.
- Students who have completed AP US History do not need to complete US History II as a prerequisite.
- In order for a student to receive Advanced Placement quality points for completing AP Government and Politics in the student's GPA, the student must receive a passing grade in US History II CP or US History II Honors. Without a passing grade in US History II CP or Honors, the weighting of the final grade in this course will be calculated into the student's GPA with the standard (non-weighted) factor.

Twelfth graders who were denied entrance to this course due to scheduling conflicts in their junior year are eligible to enroll. The purpose of this course is to prepare students to take the College Board examinations in United States Government and Politics and Comparative Government and Politics. Successful scores for these tests will indicate the equivalent of 6 college credits. Each college or university determines actual credit or advanced placement. The student is expected to have excellent reading skills, be self-motivated and work well independently, have a keen interest in government and politics, and demonstrate these qualities by reading relevant books, periodicals, and newspapers that pertain to the subject and/or involve themselves in co-curricular activities related to government and politics. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.



**SOCIOLOGY (8732) (9732)**
**Grades 9-12**
**5 Credits**

Sociology is the study of the ways people interact with one another within social groups. Sociologists study relationships within groups, between groups and in social institutions. They study the organization/structure of societies, such as our own and other interesting societies around the world. Sociologists also deal with current issues and social problems, such as violence in schools and poverty in America. The course uses various media to present the subject, such as culture grams, videos, films, and simulation games.

**PSYCHOLOGY (9734)**
**Grades 11-12**
**5 Credits**

The course is a challenging and fascinating study of human behavior and mental processes. Discover what psychologists have learned about why people do what they do. At the same time, students will make some discoveries about their own lives and behavior. Some activities of interest will include: monthly field trips to the senior center, visiting with older adults to have an exchange of dialogue, viewing interesting, insightful films for analyzing and understanding, and group sharing of experiences, observations, and ideas about illusions, hypnosis, dream interpretation, and psychological disorders to better understand self and others.

**AP PSYCHOLOGY (9735)**
**Grades 11-12**
**5 Credits (AP)**
**Prerequisites:**

- Students must achieve a minimum of a B in their previous year's honors/AP history course **or** an A- in their previous year's CP history course **or**
- Students must achieve a minimum of an A in Psychology

Advanced Placement Psychology is an elective which will prepare students to take the Advanced Placement test in May. This college level course will provide an overview of the psychology program. It is the challenging and fascinating study of human behavior. This course is for the academically serious student whose goal is to achieve high scores on the Advanced Placement test in May and looking to pursue psychology as part of their post-secondary plans. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

**AP EUROPEAN HISTORY (9738)**
**Grade 10-12**
**5 Credits (AP)**
**Prerequisites:**

- Students must achieve a minimum of a B in their previous year's honors history course (Global Studies Honors, United States History I or II Honors) or an A in their previous year's CP history course (World History, United States History I or II CP)

Advanced Placement European History is an elective that covers the period of history from approximately 1500 until the modern era. This course is geared toward the serious history student looking to successfully prepare for the Advanced Placement Test in May. This course provides an opportunity for students to explore an additional period of history within the development of Western Civilization. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students college credits upon completion of the course.

**ECONOMICS HONORS (9742)**
**Grades 11- 12**
**5 credits (Honors)**
**Prerequisites:**

- Minimum grade of B- in AP US History, B in US History I Honors, or an A in US History I CP or
- Grade 12 Students only - Successful completion of US History II CP or US History II Honors.
- Grade 11 students only - Must enroll concurrently in AP US Government and Politics and either US History II CP or US History II Honors.
- Students who have completed AP US History do not need to complete US History II as a prerequisite.
- In order for a student to receive honors quality points for completing Economic Honors in their GPA, the student must receive a passing grade in US History II CP or US History II Honor. Without a passing grade in US History II CP or Honors, the weighting of the final grade in this course will be calculated into the student's GPA with the standard (non-weighted) factor.

Honors Economics is an upper-level elective course. The curriculum involves an introduction to both macroeconomics and microeconomics and is of great value to a student who may take any economics or business course in college. High-level math skills are not required. The student is expected to have excellent reading skills, be self-motivated and work well independently, have a keen interest in social sciences and wish to explore the role of economics, and demonstrate these qualities by reading relevant books, periodicals, and newspapers that pertain to the subject and/or involve themselves in co-curricular activities related to economics.



**CONSCIENCE OF HUMANITY**

**(9736)**

**Grade 12**

**5 Credits**

**Prerequisites:**

- Successful completion of World Cultures or Global Studies Honors, U.S. History I, and U.S. History II.
- Students may successfully complete AP US History in lieu of US History I and US History II.

This course is designed as a 12th grade elective. It is open only to the mature student who has successfully completed all OBHS Social Studies Department requirements. At the conclusion of the first semester, students should be able to understand that genocide is rooted in individual bigotry and that genocide is the ultimate terrible conclusion to prejudice. By studying historical examples, students will develop an understanding of the end of prejudice and be able to apply a positive attitude towards people they encounter in their daily lives. During the first semester, students will explore the courses of genocide and the roots of prejudice and bigotry. During the second semester students will be introduced to various forms of prejudice, such as racial, religious, gender, sexual, age, etc. It is our hope that the students in this course will become people who will work to foster tolerance. Students will be asked to complete multiple readings and a successful research project.

**INTERNATIONAL STUDIES HONORS (9740)**

**Grades 11-12**

**5 Credits (Honors)**

**Prerequisites:**

- Minimum grade of B- in AP US History, B in US History I Honors, or an A in US History I CP or
- Grade 12 Students only - Successful completion of US History II CP or US History II Honors.
- Grade 11 students only – Students must have successfully completed AP US History. Must enroll concurrently in AP US Government and Politics and either US History II CP or US History II Honors.
- Students who have completed AP US History do not need to complete US History II as a prerequisite.
- In order for a student to receive honors quality points for completing International Studies Honors in the his/her GPA, the student must receive a passing grade in US History II CP or US History II Honor. Without a passing grade in US History II CP or Honors, the weighting of the final grade in this course will be calculated into the student's GPA with the standard (non-weighted) factor.

The post-World War II eras brought the United States to center stage in world affairs. This course will enable students to gain insights into the basic factors and concepts of international relations regarding the political system of the United Nations, national interest and security, wars, nationalism, economic development, and international law. The curriculum is structured primarily to strengthen students' analytical skills and provide a strong background in international affairs. Topics will include the history and function of the United Nations, the Cold War, the Korean and Vietnam Wars, and international crises in the Third World, particularly nuclear and biological threats. Students will research and analyze a country of global interest and prepare a portfolio based on their research.



# ***WORLD LANGUAGES***

## **GRADE 9**

French II  
French I  
German II  
German I  
Italian II  
Italian I  
Spanish II  
Spanish I  
Mandarin Chinese II  
Mandarin Chinese I

## **GRADE 10**

French III  
French II  
French I  
German III  
German II  
German I  
Italian III  
Italian II  
Italian I  
Spanish III  
Spanish II  
Spanish I  
Mandarin Chinese III  
Mandarin Chinese II  
Mandarin Chinese I

## **GRADE 11**

AP French  
French IV Honors  
French III  
French II  
French I  
AP German  
German IV Honors  
German III  
German II  
German I  
AP Italian  
Italian IV Honors  
Italian III

## **GRADE 11 (cont'd)**

Italian III  
Italian II  
Italian I  
AP Spanish  
Spanish IV Honors  
Spanish III  
Spanish II  
Spanish I  
AP Mandarin Chinese  
Mandarin Chinese IV Honors  
Mandarin Chinese III

## **GRADE 12**

AP French  
French IV Honors  
French III  
French II  
French I  
AP German  
German IV Honors  
German III  
German II  
German I  
AP Italian  
Italian IV Honors  
Italian III  
Italian II  
Italian I  
AP Spanish  
Spanish IV Honors  
Spanish III  
Spanish II  
Spanish I  
AP Mandarin Chinese  
Mandarin Chinese IV Honors  
Mandarin Chinese III  
Mandarin Chinese II  
Mandarin Chinese I



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**WORLD LANGUAGE**


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World languages prepare students for life in our global society. Old Bridge High School currently offers five modern languages: French, German, Italian, Spanish, and Mandarin Chinese. When students begin their study in the sixth grade, they have the opportunity of continuing the language of their choice to the Advanced Placement Level. Students who have successfully completed Spanish I, French I, Italian I, German I, and Mandarin Chinese I in the middle school shall be placed in the corresponding language, level II, when they are promoted to the high school. In the event that any student who has successfully completed a level one course in middle school insists on the same level one course in high school, he or she must make this choice within the appropriate add/drop period. *Students who wish to take a second world language course will have a choice among French, Spanish, Italian, German, and Mandarin Chinese. NOTE: Level I World Languages cannot be guaranteed.*

**WORLD LANGUAGE-LEVEL I                      Grades 9-12      5 Credits****ITALIAN I, SPANISH I, FRENCH I, GERMAN I, MANDARIN CHINESE I****(8300-9300)      (8310-9310)      (8330-9330)      (8340-9340)      (8325-9325)**

The first-year level of a world language serves as an introduction to both the language and the method of studying it. Students learn basic expressions and words that are needed in everyday life and learn how to adapt them into questions, answers, commands, and statements, using authentic methods in an immersion environment. The instructional procedure focuses on listening, speaking, reading, and writing through a variety of communicative interactive strategies. Students should expect to have a combination of written work and oral production of the target language in the class. Both types of work are a requirement for the first level, and grades will be based on how well both types of work are completed. Homework in Level I will be assigned for both speaking and writing, and students can expect assignments nearly every day. At the end of the course, students should be able to understand the language well enough to converse in a limited fashion with a native of the country from which the language is studied. As part of the course, the students will be imbued with sensitivity to the customs and culture of the people.

**WORLD LANGUAGE-LEVEL II                      Grades 9-12      5 Credits****ITALIAN II, SPANISH II, FRENCH II, GERMAN II, MANDARIN CHINESE II****(8301-9301)      (8311-9311)      (8331-9331)      (8341-9341)      (9326)****Prerequisite:**

- Successful completion of Level I in the appropriate World Language

During the second year of a world language, students will continue to develop their speaking and comprehension skills. Students will build upon the basics learned in Level I. The pattern of instruction will be similar to that of a level one class, however students can expect the teacher to speak in the target language more frequently. Activities include repeating and creating dialogues, grammatical exercises, which explore real-life situations, and limited role playing in the target language. Students will be able to respond to more complex situational dialogues, and daily participation in conversation or group discussions are expected. Moreover, in Level II, there is a greater emphasis on reading and writing. The oral work will now be recognized and manipulated, and the structure of the language will become more meaningful for the student. Further aspects of the foreign culture will also be studied.

**WORLD LANGUAGE - LEVEL III                      Grades 10-12      5 Credits****ITALIAN III, SPANISH III, FRENCH III, GERMAN III, MANDARIN CHINESE III****(9302) (9312) (9332) (9342) (9327)****Prerequisite:**

- Successful completion of Level II in the appropriate World Language

In the third level language courses, students will be expected to frequently use the four skills of world languages: listening, speaking, reading, and writing in academic and social areas. Reading and writing will continue to receive a greater emphasis at this level as more advanced literary works are explored. Specifically, students will learn the finer points of grammar and pronunciation, including any remaining verb tenses. Instructional strategy will remain similar to Level II within a complete immersion environment. Therefore, students must expect to participate orally in class and to prepare several pages of written exercises each week in the target language. Students will read and respond to cultural reading selections in the target language. Students will also be expected to give oral presentations. The study of the customs and the culture of the people will be continued.



**WORLD LANGUAGE - LEVEL IV      Grades 11-12    5 Credits (Honors)**  
**ITALIAN IV, SPANISH IV, FRENCH IV, GERMAN IV, MANDARIN CHINESE IV**  
**(9303) (9313) (9333) (9343) (9328)**

**Prerequisite:**

- Successful completion of Level III in the appropriate World Language

In the fourth level of a language, the students make daily use of the four skills - listening, speaking, reading, and writing. They spend a great deal more time on reading and writing. The student is expected to read some literary works and/or the history of target cultures and countries and be cognizant of them in both written and spoken form. Students will participate in various activities, such as skits, news broadcasts, improvised dialogues, and situational dialogues. A student can expect to prepare individual projects or papers in this course. All the points of grammar learned in the first three levels are brought together and reviewed at this level. All of the instruction at this level is in the target language. Level IV Language courses (with the exception of Mandarin) are part of the Middlesex College Dual Enrollment Program, which can potentially award students three college credits upon completion of the course.

**ADVANCED PLACEMENT WORLD LANGUAGE      5 Credits (AP)    Grade 11-12**  
**ITALIAN, SPANISH, FRENCH, GERMAN, MANDARIN CHINESE**  
**(9304) (9314) (9334) (9344) (9329)**

**Prerequisite:**

- Successful completion of Level IV in the appropriate World Language

Advanced Placement World Language is offered to students who wish to study Spanish, French, Italian, German or Mandarin Chinese at a college level. Students are trained in the skills necessary for successful completion of the Advanced Placement Test. This examination qualifies students for course credit in many colleges and universities. Oral skills, along with comprehension and composition skills, will be stressed, and cultural points will be reviewed. All of the instruction will be given in the target language. Advanced Placement Language courses (with the exception of Mandarin) are part of the Middlesex College Dual Enrollment Program, which can potentially award students three college credits upon completion of the course.



## *Physical Education and Health*

### **GRADE 9**

Physical Education 9  
Adaptive Physical Education  
Health Promotion and Protection

### **GRADE 10**

Physical Education 10  
Adaptive Physical Education  
Driver Education

### **GRADE 11**

Physical Education 11  
Adaptive Physical Education  
Drugs and Alcohol: A Social Perspective

### **GRADE 12**

Physical Education 12  
Adaptive Physical Education  
Human Sexuality and Family Living  
Option II



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## PHYSICAL EDUCATION

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The knowledge of physical education and health is an ever-changing field that students will put to use in general wellness throughout their lifetimes. Each student is required to complete four years of physical education and health.

Physical education is an activity-centered program. Students are encouraged to develop and maintain physical fitness and to acquire athletic interests that will extend beyond high school. Eleventh and twelfth grade students are given the opportunity to participate in a wide program: step aerobics, walking for fitness, square dance (juniors), social dance (seniors), volleyball, tennis, flag football, weight training, indoor games, badminton, ultimate Frisbee, and basketball, and Project Adventure.

Ninth and tenth grade students are offered some of the above activities on an introductory level. They also participate in project adventure, fitness, weights, volleyball, dance, softball, soccer, track and field, and aerobics. All students participate in Fitness Gram.

### **HEALTH PROMOTION AND PROTECTION (8505)                      Grade 9                      1.25 Credits** **Required 1/4 year**

This course is designed to teach students how to properly respond to emergencies they may face in today's society. Students will learn CPR, AED, and basic first aid procedures from certified American Red Cross instructors. An emphasis will be placed on giving students the information they need to make informed and healthy decisions for their body and mind. Additional topics will include: STD's, HIV and AIDS, non-infectious diseases, and public health care choices.

### **DRIVER EDUCATION (9513)                      Grade 10                      1.25 Credits** **Required 1/4 year**

This course is designed to reduce motor vehicle accidents and save lives through the student's conceptual understanding of defensive driving and accident prevention. Positive social attitudes, respect for the driving privilege, knowledge and respect for traffic safety and natural laws, and the development of a sense of responsibility based upon sound driving principles are emphasized.

### **DRUGS/ALCOHOL & CPR: A SOCIAL PERSPECTIVE (9523)      Grade 11      1.25 Credits** **Required 1/4 year**

This course is designed to address the various social pressures and decisions facing high school students today. Emphasis has been placed on expanding students' understanding of the physical, mental, emotional, and social effects of the use and abuse of alcohol, tobacco, and other drugs. Topics include: patterns of chemical dependency, intervention strategies, enabling and codependency, family roles, federal laws regarding chemical substances, and the social ramifications of drug abuse

### **HUMAN SEXUALITY AND FAMILY LIVING (9533)      Grade 12                      1.25 Credits** **Required 1/4 year**

As the culmination of the health education experience in the grade 12 course, students will learn relevant information needed to make independent, intelligent, informed decisions pertaining to areas of human sexuality and family living. An emphasis will be placed on increasing students' awareness of the issues surrounding these areas, as well as introducing and reinforcing the critical thinking skills needed to deal with relationship issues in a whole-life context.

<b>PHYSICAL EDUCATION 9 (8501)</b> <b>PHYSICAL EDUCATION 10 (9511)</b>	<b>PHYSICAL EDUCATION 11 (9521)</b> <b>PHYSICAL EDUCATION 12 (9531)</b>
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### **ADAPTIVE PHYSICAL EDUCATION (8599-9599-9596 9597)      Grades 9-12                      5 Credits**

Placement in this course is made upon referral from the Child Study Team. Individualized and small group instruction consistent with the Individual Education Plan is provided for each student referred.



**OPTION II (9592)****Grade 12****3.75 Credits**

Option II provides students with the opportunity to meet the New Jersey Core Curriculum Content Standards in a setting other than the traditional classroom. Student-athletes may choose between three paths towards their PE requirement by: Path A (for 12th graders): Participation in two or more NJSIAA-recognized Varsity sports or two seasons of Varsity cheerleading at the high school, OR Path B (for 12th graders): Participation in one NJSIAA-recognized Varsity sport or Varsity cheerleading at the high school, plus documented off-season-training (150 minutes/week) in the same sport/cheer with an organization approved by the principal. (See Appendix C)



# ***CAREERS & TECHNOLOGY***

## **B U S I N E S S**

### **GRADE 9**

Business and Careers  
Computer Science  
Microsoft Office Suite I  
Personal Finance  
Webpage Design/  
Desktop Publishing

### **GRADE 10**

Business and Careers  
Business/Pre-Law  
Business Management  
Accounting I  
Microsoft Office Suite I  
Microsoft Office Suite II  
Webpage Design/  
Desktop Publishing  
Marketing I  
Computer Science I  
Sports and Entertainment Mgmt.  
Personal Finance  
International Business

### **GRADE 11**

Accounting I  
Accounting II  
Marketing I  
Business and Careers  
Business/Pre-Law  
Business Management  
Internship: Business Careers II  
Microsoft Office Suite I  
Microsoft Office Suite II  
Computer Science  
AP Computer Science  
AP Computer Science Principles  
Small Business Ownership  
International Business  
Sports and Entertainment Mgmt.  
Personal Finance  
Webpage Design/  
Desktop Publishing

### **GRADE 12**

Accounting I  
Accounting II Honors  
Accounting III Honors  
Marketing I  
Business and Careers  
Business/Pre -Law  
Internship: Business Careers II  
Microsoft Office Suite I  
Microsoft Office Suite II  
Computer Science  
AP Computer Science  
AP Computer Science Principles  
Small Business Ownership  
Business Management  
International Business  
Sports and Entertainment Mgmt.  
Personal Finance  
Cooperative Business Education  
Webpage Design/ Desktop Publishing



## CAREERS & TECHNOLOGY

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### BUSINESS

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Business courses are designed to expose students to career planning in business, health, accounting, marketing, law, technological and management occupations. Our Cooperative Education program offers students an opportunity to blend academics and workplace resume building experiences. The Careers and Technology Department gives students the opportunity to obtain knowledge of skills and abilities necessary in today's global society. Computer programs such as Microsoft Word, PowerPoint, Excel, Publisher and Access are utilized in various computer courses.

#### **BUSINESS AND CAREERS (8030) (9030) Grade 9-12 5 Credits**

Exploring business and careers offers our students an understanding of how business operates and an appreciation of the relationship between business and the community. This course will give students the fundamentals of how to prepare for work and life through career planning, money management, and independent living techniques. This course will enable the students to explore their own interests and abilities through various resources so that they will be better prepared for choosing a career path. Students will acquire information in money and banking, investing, job readiness, future career trends, entrepreneurship, resumes, job interviewing, and career planning. Students will learn to understand the importance of human relations through various team-building applications, gain an understanding of the fundamentals of the stock market and investment strategies. In addition, students will gain a better understanding of bank accounts, credit and debit cards, bills, credit scores, taxes, insurance, investing and being an educated critical consumer. Guest speakers are hosted from various career paths.

#### **INTERNSHIP – BUSINESS AND CAREERS II (9034) Grades 11-12 5 Credits (Pass/Fail)**

Juniors & Seniors only

A career internship provides work-based learning experience as an extension of school-based career exploration. Juniors and seniors will have the opportunity to participate in paid/unpaid internships at a business, OBHS or an institution for one period during the school day. The internship provides career development opportunities while gaining resume building experience related to their interests, talents and abilities. Students work alongside their mentor/supervisor/educator and develop transferable academic, technical and employability skills. They gain work readiness skills and a broad overview of occupational fields while gaining an appreciation for academics. Weekly timesheets and journals are required.

#### **ACCOUNTING I (9015) Grades 10-12 5 Credits**

##### **Prerequisite:**

- Students in Accounting I must have earned a grade of "C" or better in Algebra I or a higher level mathematics course.

Accounting I develops an understanding of the accounting skills needed in the financial management of goods and service businesses organized as sole proprietorships and corporations as well as preparation for accounting or finance in college or as a career. Students will use double-entry accounting principles, journalizing, and posting routine business transactions such as cash receipts, payments, purchases, and sales. Course participants will become familiar with the primary types of business organizations, their relationship to each other, and their distinct service to society. An automated accounting computerized instructional program will be introduced to help students make the transition from manual to computer-based accounting. Business ethics will be covered to focus students' attention on ethical issues in accounting and in the business environment.

#### **ACCOUNTING II (9016) Grades 11-12 5 Credits**

##### **Prerequisite:**

- Students enrolling in Accounting II must have earned a grade of "C+" or better in Accounting I.

Accounting II expands the basic theories learned in Accounting I to focus primarily on corporations. Students will refine their knowledge of basic accounting by learning additional accounting concepts involving uncollectible accounts, depreciation, plant assets, accrued revenue and expenses, and financial reporting for a corporation. An automated accounting computerized instructional program will be utilized to help students make the transition from manual to computer-based accounting.



**ACCOUNTING III Honors (9018) Grade 12 5 Credits**
**Prerequisite:**

- Students enrolling in Accounting III must have earned a grade of “B-“ or better in Accounting II

Accounting III Honors will expand the skills learned in Accounting I and Accounting II and will concentrate on the training necessary for those who expect to study in the fields of business management, accounting, economics, marketing, or business administration at the college level. Students will utilize the accounting software program and focus primarily on a departmentalized merchandising business and eventually, a manufacturing business. Accounting III Honors is part of the Middlesex College Dual Enrollment Program, which can potentially award students three college credits upon completion of the course. Finally, students will be exposed to accounting as a career, as well as various ethical issues in business, which will help focus their attention on the importance of rational and ethical decision-making processes in a global business environment.

**MARKETING I (9040) Grades 10-12 5 Credits**

This course explores the various career opportunities and skills necessary to become successful in marketing and retail occupations. Students will develop skills in merchandizing and management as well as advertising, display, promotion, distribution, communication, human relations, and selling using a hands-on approach. Additionally, this course applies current marketing concepts to current trends in the “real world” Using multiple tools and resources such as the internet and industry standard software applications. It stresses the multicultural nature of the U.S. domestic marketplace and workplace as well as the move towards a global economy.

**BUSINESS/PRE- LAW (9035) Grades 10-12 5 Credits**

Virtually every aspect of an individual’s life is affected by business and/or personal law. This course begins with the fundamental principles of law in general and how our local, state, and federal court systems operate. Major topics covered are criminal law/torts, consumer law, problems in society, bailment, juvenile justice, and minors and employment. Personal law is covered with a focus on relevant topics using a “lifestyle” approach. Students participate in field trips to the local municipal court and the state superior court. Guest speakers include attorneys, state troopers, and local law enforcement agencies.

**MICROSOFT OFFICE SUITE I (8005) (9005) Grades 9-12 5 Credits**

Students are introduced to the Microsoft Office package, which includes Word, PowerPoint, Excel, and Access. A step-by-step approach is provided, so students learn the many features of each of these programs. Students will learn and apply the concepts to word processing documents, spreadsheets, databases, and power point presentations.

**MICROSOFT OFFICE SUITE II (9006) Grades 10-12 5 Credits**
**Prerequisite:**

- Microsoft Office Suite I with a minimum passing grade of a C or better

The rapidly changing world of technology has made computer applications an important component of learning. This course is the second course that is intended to further develop skills using Microsoft Word, Excel, PowerPoint, and Access. A step-by-step approach is provided to improve and expand students’ knowledge of Microsoft Office. This approach assists students in creating projects that will incorporate the Internet while integrating all Microsoft programs.

**WEB PAGE DESIGN/DESKTOP PUBLISHING (8010-9010) Grades 9-12 5 Credits**

The first part of this course will provide a comprehensive overview of the technology tools and layout procedures for designing published documents in Microsoft Office and Microsoft Publisher for classroom productivity. The second part of this course will expand students’ understanding of the technology tools and design layouts for classroom productivity through Web Page Development tools in Microsoft Office, HTML, and Dreamweaver. Students will be expected to use these tools to produce required classroom projects for other discipline areas.

**COMPUTER SCIENCE I (8020) (9020) Grades 9-12 5 Credits**

This course introduces the student to computational thinking, problem solving techniques, and algorithm design using web and object-oriented programming languages. Supplemental topics such as graphics, animation, robotics, and designing applications will be covered. Additionally, a brief introduction to networking, computer hardware, Internet principles, telecommunications, and emerging technologies will take place.



**AP COMPUTER SCIENCE PRINCIPLES (9022)**
**Grades 11-12**
**5 Credits (AP)**
**Prerequisite:**

- Computer Science minimum grade of a “B”

The AP Principles course introduces students to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing affects and changes the world. Topics covered in the course include: programming, robotics, cybersecurity, mobile applications, game design, networking, and social media (user experience and user interface exploration). This is an excellent course to apply skills and concepts learned in Computer Science I.

**AP COMPUTER SCIENCE**
**(9023) Grades 11-12 5 Credits (AP)**
**Prerequisite:**

- Computer Science I minimum grade of a “B”

This advanced course is intended for students who have successfully completed Computer Science I. The course features the Java programming language and uses object-oriented programming to develop solutions for business, scientific, and gaming problems. At its conclusion, the student will be encouraged to take the College Board’s Advanced Placement Examination in Computer Science. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students three college credits upon completion of the course.

**PERSONAL FINANCE**
**(8031/9031)**
**Grades 9-12**
**2.5 Credits**

This course develops personal finance skills that all students need in order to make wise decisions regarding financial security. Students will discover ways to maximize their earning potential. Topics of study include comparing/contrasting local banks and services that they provide, completion of a personal budget, comparison shopping (online), and check writing and record keeping. Students will be enrolled in the Stock Market Game. This is an online simulation, in which students work in small teams, to build a portfolio. Guest speakers and current events enhance the current curriculum. This is a half year course that is taught in conjunction with Small Business Ownership for Grades sophomores, juniors and seniors ONLY. This half-year course will be taught in conjunction with Civic Responsibilities and Rights for the Grade 9 class only.

**SMALL BUSINESS OWNERSHIP**
**(9032)**
**Grades 10-12**
**2.5 Credits**

Today, about 15% of the work force in the United States is composed of entrepreneurs, and the percentage is growing. This semester course will stress initiative, creativity, problem solving skills, and ongoing education to adapt to market changes. Students will choose a particular field that they would like to investigate in regard to business ownership. Their business idea will then be represented in the form of a business plan. Students will research the following areas: competition, location, store layouts, product offerings, pricing strategies, and advertising campaigns. This is a half year course taught in conjunction with Personal Finance for Grades 10-12.

**INTERNATIONAL BUSINESS**
**(9038)**
**Grades 10-12**
**5.0 Credits**

This course will help students develop an understanding of the global marketplace and how businesses throughout the world interact with each other. Topics such as protocol, language, holidays, geography, time differences, currency, customs, and gift giving are studied. Students will learn the fundamentals of international business with a “hands-on” approach. There is a focus on current events and travel. Case studies and research companies such as Microsoft, McDonald’s, Proctor & Gamble, Heinz, and other multinational businesses will be studied.

**BUSINESS MANAGEMENT**
**(9036)**
**Grades 10-12**
**2.5 Credits**

Students learn the basis of management today, the management environment, planning, organizing, leadership, and quality control skills. Critical thinking skills are developed through case studies about real-world situations in corporate America. Additionally, students explore their potential management style and careers in management. Other topics include ethics, law, social responsibility, and organizational structure. This is a half year course that is taught in conjunction with Sports and Entertainment Management.

**SPORTS AND ENTERTAINMENT MANAGEMENT**
**(9039) Grades 10-12 2.5 Credits**

This course emphasizes Sports and Entertainment Management topics such as leadership, finance, product management, people management, information management, legal and ethical issues, customer relations, sales management, managing change, and career development. Students will become familiar with the management of athletic retail outlets to professional sport teams. Half year course taught in conjunction with Business Management



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**CAREERS & TECHNOLOGY**

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**COOPERATIVE EDUCATION**

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The following requirements apply to the Cooperative Education Program:

- Students must complete a Cooperative Education application, submit for review and interview with the Cooperative Education Coordinator prior to enrolling in the program.
- Students cannot have more than 14 unexcused absences in grade 11.
- Students must have a willingness to secure employment for the Program and complete 540 hours at their workplace to qualify for credit and comply with the New Jersey required work hours. Employment must be paid through a payroll system (no under the table compensation.)
- Students will be scheduled for early release in order to report to job stations and will be responsible for arranging their own transportation.

**COOPERATIVE EDUCATION (9043)**

**Grade 12**

**15 Credits**

**Prerequisite:** Business/Technology Department Class

Cooperative Education is a work-study program open to seniors who are employed/seeking employment in local businesses to gain on-the-job training. Students have a related class in which they study and review skills needed to succeed after graduation. Adulting 101, college/vocational preparation, independent living, workplace safety, networking, financial fitness, future workforce trends and practices. Students gain an understanding of required universal and soft skills, build a personal Career Portfolio and LinkedIn account through classroom activities and resume building workplace experience.



# *CAREERS & TECHNOLOGY*

## FAMILY CONSUMER SCIENCE

### **GRADE 9**

Clothing Design I  
Culinary Arts I

### **GRADE 10**

Fashion Merchandising and Interior  
Decorating  
Clothing Design I  
Clothing Design II  
Child Development I  
Culinary Arts I  
Culinary Arts II

### **GRADE 11**

Fashion Merchandising and Interior Decorating  
Clothing and Design I  
Clothing and Design II  
Clothing Design III  
Culinary Arts I  
Culinary Arts II  
Culinary Arts III  
Child Development I  
Child Development II

### **GRADE 12**

Fashion Merchandising and Interior Decorating  
Clothing Design I  
Clothing Design II  
Clothing Design III  
Culinary Arts I  
Culinary Arts II  
Culinary Arts III  
Child Development I  
Child Development II  
Child Development III Honors



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**CAREERS & TECHNOLOGY**

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**FAMILY CONSUMER SCIENCE**

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**FASHION MERCHANDISING AND  
INTERIOR DECORATING**

**(9115) Grades 10-12 5 Credits**

This course covers two areas in one year – interior decorating and fashion merchandising. Interior decorating will familiarize students in the areas of home decoration, furniture construction, housing costs, furniture arrangement, kitchen planning, window treatments, floor plans, and architectural styles. Fashion merchandising will familiarize students with the business end of the fashion industry. Topics will include fashion buying, selling, visual display, product development, advertising, textiles, running a retail operation, inventory management and publications.

**CLOTHING DESIGN I (8120-9120)**

**Grades 9-12 5 Credits**

This course is a basic introduction to clothing construction and design. It focuses on basic sewing construction skills, pattern and fabric selection, sewing equipment, fashion trends, design principles, fashion terminology, safety, choosing clothing for your body type, and fashion careers. This course is a beginning course for a student who is interested in constructing clothing and designing clothing. Student may supplement projects with their own materials.

**CLOTHING DESIGN II**

**(9121) Grades 10-12 5 Credits**

**Prerequisite:**

- Clothing Design I

This is an advanced clothing construction and design course that builds upon competencies learned in Clothing Design I. While enrolled in this course, students will learn advanced sewing skills while applying their creativity to clothing construction for themselves and/or others. This course will also introduce students to various facets of the fashion industry, history of costume, famous designers, and advanced fashion design for portfolio usage. The course will culminate in the presentation of student work in a photo shoot. Students may supplement projects with their own materials.

**CLOTHING DESIGN III**

**(9122)**

**Grades 11-12**

**5 Credits**

**Prerequisite:**

- Clothing Design II

This advanced course builds upon skills developed in its prerequisites by providing practical application of design skills. Students will learn to create their designs through draping and pattern making methods. Period costume will be studied, designed and created for school plays. Highly recommended for any student wanting to pursue a future in clothing and fashion design.

**CULINARY ARTS I (8130-9130)**

**Grades 9-12 5 Credits**

This course is an introduction to the culinary arts curriculum. It involves the orientation into culinary arts by using various hands-on preparation techniques and cooking methods; the selection and correct use of tools and equipment; an introduction into nutrition; and the development of good sanitation and safety practices. There is an emphasis on the use of evaluation and decision making to create a knowledge base for success in the higher level culinary art classes.

**CULINARY ARTS II**

**(9131) Grades 10-12 5 Credits**

**Prerequisite:**

- Culinary Arts I

This course is designed for students who have a special interest in foods and the culinary arts. Focus is on meal planning, baking, American regional cuisine and International cuisine. Students continue hands-on preparation techniques and cooking methods; the selection and correct use of tools and equipment; and sanitation and safety practices. There is an emphasis on the use of evaluation and decision making to create a knowledge base for success in the higher level culinary art classes.



**CULINARY ARTS III (9132)**

**Grades 11-12**

**5 Credits**

**Prerequisites:**

- Course Prerequisites: Culinary Arts I and II
- Students must earn a grade of C or better in Culinary Arts II

This course is designed for students who already have a solid background from Culinary Arts I and Culinary Arts II and have a passion for cooking. Students operate the Knight & Day Catering business within the school. They have an opportunity to learn organizational skills, entrepreneurial skills, increase math skills, marketing skills, and improve social skills. The students prepare and sell food to staff, teachers, parents, and students each month. Money raised from the catering orders will be used as Senior Scholarship for those students who will pursue culinary school, hospitality & event planning, or for those who have excelled in this course.

**CHILD DEVELOPMENT I (9140)**

**Grades 10-12 5 Credits**

This course is essential to anyone pursuing a career in education or is interested in a career working with children. Students will be given the opportunity to teach preschool children, in our student run preschool, & write lesson plans that align with the NJCCCS. This course introduces students to the child education and care profession. It is designed to increase understanding of the basic concepts of child development and the developmental characteristics of children from ages 3-5 through years. This course is the foundation for planning appropriate activities for children and establishing appropriate expectations of young children. This class also offers an opportunity to study the developmental domains (social, emotional, cognitive/language and physical) and the impact child theorists have had on education. Course includes observations of the young child in early childhood settings.

**CHILD DEVELOPMENT II (9142)**

**Grades 11-12**

**5 Credits**

**Prerequisite:**

- **Child Development I minimum grade of a “C-“**

This course is a continuation of CD I and includes further in-depth study of child growth and development from conception through early childhood. Students continue to operate the student run preschool & explore careers for working with children. As part of the course, students will participate in the Reality Baby experience, where they will discover what it is like to be the parent of a newborn. Emphasis is on principles underlying physical, mental, emotional and social development, and methods of child study and practical implications. Upon completion, students will be able to use knowledge of how young children differ in development and approaches to learning to provide opportunities that supports physical, social, emotional, language, and cognitive development.

**CHILD DEVELOPMENT III HONORS (9143)**

**Grade 12**

**5 Credits**

**(Honors)**

**Prerequisite:**

- **Child Development I and II – minimum grade of a “C“ in level II**

This course is to enhance student understanding of concepts intrinsic to development of critical thinking skills & provide workplace readiness skills. Students continue to operate the student run preschool & assume more responsibilities in the day-to-day operation of the preschool. The course is divided into three sections: Enhancing Learning, Experiencing the Classroom, & Experiencing Education. A portfolio that can be used on the college level or to obtain a position working with children. Emphasis is placed on college level work. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students three college credits upon completion of the course. Requires a Middlesex College prerequisite PSY123 (AP Psychology).



# ***CAREERS & TECHNOLOGY***

## **DESIGN TECHNOLOGY**

### **GRADE 9**

Intro to Cosmo  
Woodworking I

### **GRADE 10**

Intro to Cosmo  
Woodworking I  
Woodworking II  
Intro to Architectural Design/CAD  
Creative Design I  
Electronics I  
Cosmetology I  
Automotive Service I

### **GRADE 11**

Woodworking I  
Woodworking II  
Woodworking III  
Intro to Architectural Design/CAD I  
Architectural Design/CAD II  
Creative Design I  
Creative Design II  
Electronics I  
Electronics II  
Automotive Service I  
Automotive Service II  
Cosmetology II  
Engineering Design I  
Engineering Design II

### **GRADE 12**

Woodworking I  
Woodworking II  
Woodworking III  
Woodworking IV Fabrications  
Intro to Architectural Design/CAD I  
Architectural Design/CAD II  
Architectural Design/CAD III  
Creative Design I  
Creative Design II  
Creative Design III  
Electronics I  
Electronics II  
Automotive Service I  
Automotive Service II  
Automotive Service III  
Cosmetology III  
Engineering & Design I  
Engineering & Design II  
Engineering & Design III  
Aquaponics



## CAREERS & TECHNOLOGY

### DESIGN TECHNOLOGY

This department provides the students with the opportunity to develop skills that may be utilized in the world of work or post-secondary education.

#### **WOODWORKING I (8071-9071) Grades 9-12 5 Credits**

The emphasis in this course is learning about wood as a material and as a valuable natural resource. The course will follow industry safety procedures and follow a hands-on approach to woodworking. Processes of industry will be followed to provide the students with an opportunity to examine industry practice. Students will be required to work through the design loop process and problem solving process to produce a project during each marking period.

#### **WOODWORKING II (9072) Grades 10-12 5 Credits**

##### **Prerequisite:**

- Woodworking I

In this course, students will develop skills necessary to design wood and maintain shop equipment. Students will further develop techniques taught in Woodworking I and use skills to design and build furniture. Mass production methods will be used when students create their own manufacturing process. Emphasis will be placed on the skills necessary to succeed in the woodworking trade.

#### **WOODWORKING III (9073) Grades 11-12 5 Credits**

##### **Prerequisite:**

- Students must earn a grade of a C or higher in Wood II

This course will develop advanced skills in problem solving, design, construction and finishing of wood projects and other associated products. Projects will be of a more complex nature and require teamwork to complete. Students will have freedom to demonstrate creativity. Properties of wood and other related materials will be explored to gain the knowledge needed for complex designs and construction.

#### **WOODWORKING IV / FABRICATIONS (9114)**

**5 Credits**

##### **Prerequisites:**

- Students enrolling in Wood IV Fabrications must have earned a grade of "C+" or better in Wood III

Woodworking IV Fabrications combines computers with traditional woodworking, giving students access to design software, CNC Machines, and the rest of the woodshop materials and machines. This course moves students through the process of planning, design, analysis, production, and fiscal examination through "real life" applied activities. Because engineers and "Makers" use technology to solve problems and create, many of the lessons are related to the field of engineering and artistic design.

#### **INTRO TO ARCHITECTURAL DESIGN/CAD I (9085) Grades 10-12 5 Credits**

This course will introduce the basic principles of design and drawing utilizing state of the art CAD (Computer Aided Drafting) software. The class uses AutoCAD and Revit products which includes 2 & 3-dimensional drawing. This class encompasses life skills by providing an introduction to design and construction techniques. Basic design elements will be taught along with design challenges and cooperative team building activities. Students will have opportunities for field trips to local architectural landmarks and projects to have firsthand knowledge of the subject they have been studying. Sketching and drawing skills will be taught with no prior knowledge required

#### **ARCHITECTURAL DESIGN/CAD II (9086) Grades 11-12 5 Credits**

##### **Prerequisites:**

- Intro to Architectural Design/CAD I
- Students enrolling in Architectural Design/CAD 2 must have earned a grade of "C+" or better in Architectural Design/CAD I

Skills acquired during CAD I will be built upon to prepare students for the transition to the workplace. Tools learned during the intro to Architectural design will be used to develop real life in depth design solutions. Students will gain experience in surveying, home design, the five phases of architectural design, and construction techniques.



Professional portfolio design and resume development will also be studied. A continuation of field trip opportunities will also be offered.

**ARCHITECTURAL DESIGN/CAD III (9087)                      Grades 12                      5 Credits**

**Prerequisites:**

- Architectural Design/CAD 2
- Students enrolling in Architectural Design/CAD 3 must have earned a grade of “B-” or better in Architectural Design/CAD 2

This is the third and final offering in this Architectural Design / CAD class selection. Students emulate professional job experience while working on a design portfolio. Students are expected to take a serious approach toward design to the best of their ability for real life clients who need design assistance. Students also use studio time to further develop design skills in 3D Modeling and Animation. Design solutions to real projects will be pursued and incorporated into the curriculum. Design challenges, presentations and critiques will be practice.

**CREATIVE DESIGN I (9090)                                      Grades 10-12                                      5 Credits**

Creative Design 1 is an introductory course to The Digital Creative series that looks at the graphic elements and principles of design as related to practical products, systems, and environments. It introduces students to the design process practiced by artists, designers, and engineers, valuable to both future producers and consumers. Content includes problem solving, digital drawing, and modeling skills commonly used by designers; development of a design vocabulary; the nature and evolution of technological design; the impacts of design on society and the environment; patents and intellectual property; human factors; and team design. Students learn Photography using the full capabilities of the modern Digital SLR Camera while learning specific digital imaging software packages and new design skills. Design problems are presented within real-world contexts using field trips and outside speakers. Students will develop an understanding and appreciation for art, design, engineering, and the creative process through STEM while document their work through a design portfolio. This course has no prerequisites.

**CREATIVE DESIGN II (9091)                                      Grades 11-12                                      5 Credits**

**Prerequisites:**

- Creative Design 1
- Students enrolling in Creative Design II must have earned a grade of “C+” or better in Creative Design I

Creative Design 2 is the second course to The Digital Creative series. Building off of the design and photography skills and software knowledge learned in level one, this secondary course is designed to allow students to create commercial style graphics that tell stories through visual imagery. Students follow the design process while conceptualizing and brainstorming, refining ideas, and seeking market feedback while building professional advertisements. Students are also introduced to 3D Modeling and animation with career tracks in motion picture production and video game design. Students continue to develop an understanding and appreciation for art, design, engineering, and the creative process through STEM while document their work through a design portfolio.

**CREATIVE DESIGN III (9092)                                      Grades 12                                      5 Credits**

**Prerequisites:**

- Creative Design I; Creative Design II
- Students enrolling in Creative Design III must have earned a grade of “B-” or better in Creative Design II.

Creative Design III is the third and final course in The Digital Creative series. Students work as a design team working in a highly specialized studio. This course is designed as a capstone internship experience that is run like a business offering Photography, Design, and Advertising needs to real life clients. Students gain professional experience while completing a design portfolio. Students are expected to take a serious approach toward design to the best of their ability for real life clients who need design assistance. Students also use studio time to further develop design skills in 3D Modeling and Animation. An Adobe Certified Associate (ACA) certification exam is given upon conclusion of this course giving students a professional credential sought after in this creative career field.



**ENGINEERING & DESIGN I (9094) Grades 10-12 5 Credits**

This course introduces students to problem solving techniques, engineering concepts, and the design process. Students will be exposed to 3D modeling, structures and mechanisms, transportation technologies, engineering drawing, and electronics, while investigating several Engineering disciplines. This course promotes the STEM (Science, Technology, Engineering, and Mathematics) Project, which is a national educational movement promoting technology implementation and curriculum development throughout the country. Students will be able to synthesize and apply classroom knowledge, improving on their ability to problem solve and adjust to the new technologies of the world. Students enrolled in this class will be expected to use hand tools and machinery while working with various types of materials.

**ENGINEERING & DESIGN II (9097) Grades 11-12 5 Credits**

**Prerequisite:** Engineering and Design I with a minimum grade of “C+”

This course is available to students who have completed Engineering & Design I and are interested in pursuing a career in the field of Engineering. The main focus of this course is to enable students to utilize materials and equipment to solve real-life problems through hands-on activities and modeling. This course will expand on concepts that were learned in Engineering & Design I. Mechanical Engineering, Civil Engineering, Electrical Engineering, Bioengineering, Aerospace Engineering, Alternative Energy, and the utilization of CAD software are just a few of the items that will be covered in the class. Math and science concepts will be used throughout the projects designed and constructed in this course.

**ENGINEERING & DESIGN III (9098) Grade 12 5 Credits**

**Prerequisite:** Engineering and Design II with a minimum grade of “B-“

This course is available to students who have completed both Engineering & Design I and Engineering & Design II and are interested in pursuing a career in the field of Engineering. The main focus of this course is to enable students to further utilize materials and equipment to solve real-life problems through hands-on activities and modeling. This course will serve as a Senior Capstone course for the Engineering & Design Program. Mechanical Engineering, Civil Engineering, Electrical Engineering, Bioengineering, 3-Dimensional Printing, and the utilization of CAD software are just a few of the items that will be covered in the class.

**ELECTRONICS I (9100) Grades 10-12 5 Credits**

This course offers the student the opportunity to explore the basic principles of electricity from direct current to alternating current using resistance, capacitance, and inductance in circuits. An investigation of series and parallel circuits, using various components, will be expanded to household wiring and the repair of minor appliances. Basic electronic theories will be introduced, and students will become familiar with basic electronic testing equipment and basic troubleshooting procedures.

**ELECTRONICS II (9101) Grades 11-12 5 Credits**

**Prerequisite:**

- Electronics I

This course expands the skills learned in Electronics I to the application of transistors and other components to radio and television circuitry. Modern test equipment, its operation, and testing procedures will be used to check and evaluate radio frequencies, audio frequencies, and other subassemblies. Individual projects will be used to provide additional practical application of classroom studies.

**AUTOMOTIVE SERVICE I (9110) Grades 10-12 5 Credits**

Will you begin driving a vehicle during high school? What an exciting time in your life. This course is designed to develop basic automotive diagnostic and repair skills plus necessary consumer skills for purchasing and maintaining a vehicle. If you decide to choose this route either to learn the essential skills to become a world class Automotive Technician or an Educated Consumer, you will save a small fortune during your lifetime. Students will study the primary vehicle systems including the fuel system, electrical system, cooling system, and lubrication system. Engine design, construction, and theory of operation seam all the primary systems into one complete synchronized unit. As a NATEF Certified program; a few of the fundamental tasks completed include, oil changes, tire replacement/balancing, electrical system testing, and cooling system inspection and testing. Also, various preventive maintenance tasks accomplish a well-balanced program.



The best part of it all! You're the driver! You decide which path to travel and complete your chosen Elective course goals. So, join us and learn valuable hands-on, career-ready automotive skills plus life skills/experiences related to consumer vehicle purchase and maintenance.

### **AUTOMOTIVE SERVICE II (9111) Grades 11-12 10 Credits**

#### **Prerequisite:**

- Students must earn a grade of a C+ or better in Automotive I

This second year course is designed to reinforce skills taught in Automotive I as well as introduce additional automotive systems such as brakes and computerized engine controls. Student will perform brake service including cutting drums and rotors and basic tune-ups. The curriculum also covers fuel systems and an introduction to the on-board computer systems in late model vehicles.

### **AUTOMOTIVE SERVICE III (9112)**

**Grade 12**

**10 Credits**

#### **Prerequisites:**

- Automotive Service II
- Students must earn a grade of a C+ or better in Automotive II

This course is designed to reinforce all the knowledge and skills taught in the previous two courses and equip students with entry-level skills needed to begin a career in the automotive industry. The curriculum includes the study of steering and suspension, including computerized four wheel alignments and restraint system diagnosis. In addition students will study diagnosis and repair of on-board computer systems. Advanced brake work, including ABS systems and electronics will be taught. Student will also be expected to work with greater speed and efficiency on common repair work such as shocks, struts, oil changes, and tire mounting and balancing.

### **AQUAPONICS (9113)**

**Grade 11-12**

**2.5 Credits**

Aquaponics is the combination of aquaculture and hydroponics that allows fish and plants to grow together in one integrated system. This symbiotic relationship between fish and plants is a great opportunity for students to build and maintain a system that could be used to learn about plant life cycles, sustainable farming, nitrogen cycle, parts of a seed, germination, growth rate of plants, data collection and ethics of green technology

### **INTRO TO COSMO (8080)**

**Grade 9**

**5 Credits**

### **COSMETOLOGY I (9080)**

**Grade 10**

**10 Credits**

### **COSMETOLOGY II (9081)**

**Grade 11**

**15 Credits**

### **COSMETOLOGY III (9082)**

**Grade 12**

**15 Credits**

#### **Prerequisites:**

- For Cosmetology I: A grade of C+ or better in Intro to Cosmo and a minimum of 120 hours
- For Cosmetology II: A grade of C+ or better in Cosmetology I and a minimum number of classroom hours of 258.
- For Cosmetology III: A grade of C+ or better in Cosmetology II and a minimum number of classroom hours of 795.

Cosmetology is a multi-year program that will include appropriate clinical experiences and related classroom instruction necessary to prepare the students for the state license examinations and gainful employment in the field. Selected skills taught include, manicuring, shampoos and rinses, hair tapering and shaping, facials, etc. Related instruction will include bacteriology, physiology, chemistry, and shop management. Students must complete 1200 hours of cosmetology instruction in order to qualify to sit for the State licensing board exam. All students must meet all state and local academic requirements in order to continue in the program through senior year. Each student is required to purchase a standard state kit. The cost of the kit is approximately \$400. A \$100 deposit is due prior to the end of the current school year for new students.



# *PERFORMING ARTS*

## MUSIC

### **GRADE 9**

Vocal Chorale Tenor/Bass  
Vocal Chorale Soprano/Alto  
Strings  
Wind Ensemble  
Symphonic Band  
Percussion  
Music Appreciation  
Music Production

### **GRADE 10**

Vocal Chorale Tenor/Bass  
Vocal Chorale Soprano/Alto  
Strings  
Music Theory I  
Wind Ensemble  
Symphonic Band  
Percussion  
Music Appreciation  
Music Production

### **GRADE 11**

Vocal Chorale Tenor/Bass  
Vocal Chorale Soprano/Alto  
Strings  
Music Theory I  
AP Music Theory  
Vocal Music Recital  
Wind Ensemble  
Symphonic Band  
Percussion  
Music Appreciation  
Music Production

### **GRADE 12**

Vocal Chorale Tenor/Bass  
Vocal Chorale Soprano/Alto  
Strings  
Music Theory I  
AP Music Theory  
Wind Ensemble  
Symphonic Band  
Percussion  
Vocal Music Recital  
Music Appreciation  
Music Production



## PERFORMING ARTS

### MUSIC

#### **VOCAL CHORALE TENOR/BASS-PERFORMANCE CHOIR (8371-9371) Grades 9-12 5 Credits**

Students will learn basic music theory, sight singing, and vocal techniques specific to the changing needs of the tenor/bass voice. Students will explore the repertoire of the entire concert choir and will be expected to participate in all concert choir performances. In addition, they will explore the foundations of small ensemble work.

#### **VOCAL CHORALE SOPRANO/ALTO PERFORMANCE CHOIR (8370-9370) Grades 9-12 5 Credits**

Students will learn basic music theory, sight singing, and vocal techniques specific to the needs of the changing soprano/alto voice. Students will explore the repertoire of the entire concert choir and will be expected to participate in all concert choir performances. In addition, they will explore the foundations of small ensemble work.

#### **PERCUSSION ENSEMBLE (9375) Grades 9-12 5 Credits**

Percussion provides students with basic musical and technical skills on percussion instruments (drums and mallet instruments). Through a series of progressive studies, emphasis is focused on individual technique, music reading and musical interpretation. Students are prepared for percussion ensemble and concert band performances in the winter and spring. Instruments are provided. **No experience is necessary.**

#### **SYMPHONIC BAND (8376-9376) Grades 9-12 5 Credits**

Symphonic Band provides beginning students with basic musical and technical skills on band instruments (brass, woodwind, and upright bass). Through a series of progressive studies, emphasis is focused on correct tone quality, individual technique, music reading, and musical interpretation. Students are prepared for orchestral ensemble performances in the winter and spring. Each student must provide his/her own instrument. **No experience is necessary.**

#### **WIND ENSEMBLE (8377-9377) Grades 9-12 5 Credits (Honors Credit)**

##### **Prerequisite:**

- **Symphonic Band and Audition**

Advanced Band (Wind Ensemble) provides students with advanced musical and technical skills on band instruments (brass, woodwind, and upright bass). Through a series of progressive studies, emphasis is focused on correct tone quality, individual technique, music reading, and musical interpretation. Students are prepared for orchestral ensemble performances in the winter and spring. Each student must provide his/her own instrument. Ensemble will be selected by an audition in the preceding year.

#### **MUSIC THEORY I (9380) Grade 10-12 5 Credits**

This course is designed for students who desire a more thorough understanding of music based on knowledge of the techniques and skills involved in its structure. The course will cover such topics as music note values, grand staff, key signatures, major and minor scales, intervals, rhythms, chord structure, modes, and harmonization. Guitar Tablature is not covered in this course

#### **AP MUSIC THEORY (9381) Grades 11 - 12 5 Credits (AP)**

##### **Prerequisite:**

- **Music Theory I**

The AP Music Theory course corresponds to a college music theory course that covers topics such as musicianship, theory, musical materials and procedures. Musicianship skills including dictation and other listening skills, sight-singing and keyboard harmony are considered an important part of the course. Through the course, students develop the ability to recognize, understand and describe basic materials and processes of music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the learning process. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed and fluency with basic materials are emphasized. The course provides the student with a study of melodic, harmonic, and rhythmic concepts. It includes the skills of sight singing, dictation, and writing traditional harmony utilizing traits in root position, 1st and 2nd inversion, secondary dominants, modulations, seventh, ninth chords, and cadences. Creative work and composition are encouraged.



**VOCAL MUSIC RECITAL HONORS (9385)****Grades 11-12 5 Credits (Honors)****Prerequisite:**

- Must be recommended by teacher.

This class gives individuals the opportunity to develop their performance skills. They are given the opportunity to sing in small ensembles as well as solo work.

**STRINGS****(9390)****Grades 9-12****5 Credits**

The Strings program provides students with training in basic musical and technical skills on strings instruments (violin, viola, cello, upright bass). Through a series of progressive studies, emphasis is focused on correct tone quality, individual technique, music reading and musical interpretation. Students are prepared for orchestral ensemble performances in the winter and spring. Each student must provide his/her own instrument.

**MUSIC APPRECIATION****(9391)****Grades 9-12****5 credits**

Students will explore and familiarize themselves with music from a historical and appreciation perspective. The course would focus on aspects of music history, composers, genres, instrument families, introduction to specific instrumentation, including voice as appropriate and identification of specific eras. Additionally, it would focus on the aesthetic theories of active listening in order to develop informed decisions about music as a whole. The course would contain activities which are interactive with some lecture, engaging in class discussions and participating in/attending (virtual, as needed) live concerts. Musical genres and styles will cover works from diverse world cultures. Music Appreciation, as with all music courses prepares students to think critically, increases communication skills, develops and enhances teamwork and raises awareness of social and civic responsibility.

**MUSIC PRODUCTION****(9393)****Grades 10-12****5 credits**

The Music Production course is offered to all high school students as practical, hands-on training in the career field of modern music production. The coursework includes the study of sound science, tools of the trade, professional vocational skills in practice and best business practices in the unique world of music production. Students will explore strategies on how to produce, analyze and deliver sound production technology while learning business skills and client communication methods. Scientific and technological background information will also be taught, including waveforms, electricity, digital vs. analog and the behavior of sound waves. Students will use up-to-date technology, interfacing with MIDI capable devices, recording production and capturing live performances via microphone and turning it into digital media.





# VISUAL ARTS

## **GRADE 9**

Art I

## **GRADE 10**

Art I

Art II

Commercial Art I

Ceramics and Crafts

Computer Art

## **GRADE 11**

Art I

Art II

Art III

Commercial Art I

Commercial Art II

Computer Art

AP Art History

Ceramics and Crafts

Ceramics and Crafts II

Ceramics and Crafts III

Portfolio Art

## **GRADE 12**

Art I

Art II

Art III

Commercial Art I

Commercial Art II

Computer Art

AP Art History

Ceramics and Crafts

Ceramics and Crafts II

Ceramics and Crafts III

Portfolio Art



## FINE ARTS

### VISUAL ARTS

#### **ART I (8350-9350)      Grades 9-12      5 Credits**

This is an introductory course in art designed to give the students a general exposure to the many and varied popular forms of two-and three-dimensional art. The students learn the basic principles of art and translate them into their own visual means of expression. Art appreciation is nurtured through reproductions of famous art works. Practical art experiences in painting, sculpting, drawing, and art will provide students with a basis for future art course selections. Field trips, college visitations and museum visits are an integral part of most art courses. Students should expect to attend these scheduled, approved activities.

#### **ART II (9351)      Grades 10-12      5 Credits**

##### **Prerequisite:**

- Art I

This course is a comprehensive study of the procedures and techniques of painting and sculpture. The painting medium is acrylic; the sculpture materials may be plaster or clay. The subject matter will be the choice of the student with the guidance of the teacher. Experimentation is encouraged along with the development of the student's skills and special interests. It is a foundation for future painting and sculpturing experiences. Students will also participate in local exhibitions.

#### **ART III (9352)      Grades 11-12      5 Credits**

##### **Prerequisite:**

- Art II

This course is the logical continuation of Art II. Students will have the opportunity to further develop their skills and talents in painting, drawing, sculpture, etc. Experimentation is encouraged. Materials include acrylic paints, water color, pastel, charcoal, clay, silver work, Pariscraft, etc.

#### **COMMERCIAL ART I (9355)      Grade 10 -12      5 Credits**

##### **Prerequisite:**

- Art I

Commercial Art generally signifies one thing — illustration. Commercial Art activities include cartooning, fashion design, paste-up and layout, lettering, design and print making, to mention a few. Some of the techniques covered include pastel painting, watercolor, pencil drawing, scratchboard, and pen and ink. In addition, the course introduces students to the methods for the reproduction of finished art works. Students acquire a working knowledge of the commercial art field and an introduction to the various activities, tools, and techniques of the commercial artist.

#### **COMMERCIAL ART II (9356)      Grades 11-12      5 Credits**

##### **Prerequisite:**

- Commercial Art I

This course is designed for the student who has already completed Commercial Art I and is interested in further developing his/her artistic skills and expression. Areas of exploration may include air brush painting, pastel, watercolor, pencil, and pen and ink drawing. Lessons in caricature as well as animation are included if time allows. An emphasis is placed on creativity, composition (design), and problem solving via art techniques and principles made familiar to the students in Commercial Art I.

#### **COMPUTER ART (9359)      Grades 10-12      5 Credits**

##### **Prerequisite:**

- Art I

This course is designed for the art student interested in learning about creating art on a personal computer. The traditional skills and principles acquired in basic art are applied to the computer environment via programs such as Photoshop, Illustrator, Cinemation, Dabbler, and Morph to name a few. Activities include: making illustrations, creative lettering, animation (cartooning), scanning, printing in color and black and white, using the digital video camera, and making 3 dimensional images on the computer. This course is highly structured. Projects and class assignments are expected on a regular basis.



**AP ART HISTORY (9366) Grades 11-12 5 Credits (AP)**

**Prerequisite:**

- Art II with minimum B+ average OR 1 Honors or AP course with B+ average

This is a humanities approach to the teaching of art history. The course is designed with the objective of developing an understanding of, and appreciation for, past and contemporary visual art forms. Social, economic, musical, and literary elements of history will give relevance to the art that is studied. Videos, PowerPoint presentations and technology-driven materials, along with field trips, and slides will be reinforced by relevant in-class art experiences. This is an excellent course for preparing for art school, college, or for an in-depth appreciation of the visual arts. The Advanced Placement Art History course is constructed on the basis of the first year of world art history at the college level. This is a foundation course which all Art majors are required to take on the college level. A.P. Art History consists of textbook, note-taking, PowerPoint presentations and projects to bring a level of understanding to the student of art through the ages with its social and historical importance. The student will study, in sequence, the ages, periods, styles, and artists of the past and present. This course will aid the Art major or History student in easing some of the pressure off their first year in college. This course is part of the Middlesex College Dual Enrollment Program, which can potentially award students three college credits upon completion of the course.

**CERAMICS AND CRAFTS I (9353) Grades 10-12 5 Credits**

**Prerequisite:**

- Minimum knowledge of basic art required

This course enhances students' awareness of the significance of the ceramics and crafts movement in the present and past. Students will concentrate on creating original clay works using hand construction. Integrating arts and crafts, students will experience various media. Textiles and fiber will be used to design paper cuts and baskets, along with silk painting etc. Fibers also include the use of plaster to create a three-dimensional mask. Printmaking techniques and multiple prints will be made in class to create an array of works being produced in class. Throughout the year students will be studying crafts and crafters from other countries. They will incorporate the knowledge learned to enhance their own finished craft projects. This course, along with the upper levels are a production-based class where all works are handmade.

**CERAMICS AND CRAFTS II (9354) Grades 11-12 5 Credits**

**Prerequisite:**

- Ceramics and Crafts I

This course will enable students enrolled in Ceramics and Crafts I to further their experiences with various media and master selected skills while learning new techniques. Students taking Ceramics and Crafts II will be able to utilize all materials and tools, including technology pertaining to the subject matter that they are learning to master according to the curriculum. The students will increase their skills which will help them to obtain classroom subject matter proficiency. Included in the Ceramics and Crafts II course, students will explore contemporary craft artists and discover new art works by taking field trips to selected museums. The format of the class will allow for teacher demonstrations, brief lectures, student to student teaching and technology interaction. The open environment and will allow student freedom to explore multi-media with the intent to master a craft. This course may also help students attain a level of proficiency to the point where they can succeed in pursuing a possible career in art or continuing to a higher academic institution. Objectives of this course include: an appreciation and understanding of historical and contemporary artists within diverse cultures; hands-on work with a variety of mixed media including (but not limited to) metal wood, glass, fibers, clay, and much more; ability to express and create opportunities to work with diverse hand, power, and/or machine tools with the progression of the course; ability to describe, analyze, interpret, and make critical thinking skills about the form and content of their art and others.

**CERAMICS AND CRAFTS III (9357) Grades 12 5 Credits**

**Prerequisite:**

- Ceramics and Crafts II or teacher recommendation

Ceramics and Crafts III is designed for the dedicated art student who is interested in continuing with mixed media. In this advanced class students will work heavily with clay and should have a strong knowledge of various hand-building techniques. This course includes advanced methods of clay construction. Students will immerse themselves further into working with clay by throwing on the potter's wheel. Ceramics and Crafts III encourages strong craftsmanship, self-expression, and aesthetic awareness through critique. Visual problem solving is emphasized and



creative solutions of specific assignments are promoted. With mixed media being a component, students will experiment with various materials such as metals, wood, and mosaics with various sizes and methodology.

**PORTFOLIO ART      (9365)      Grade 11-12      5 Credits      (Honors)**

**Prerequisite:**

- A minimum of two art courses AND teacher recommendation

This course is specially designed for visual arts students who wish to pursue art as a career. These students, both juniors and seniors, are those who can benefit from smaller group instruction and who wish to pursue a career in art or an allied field. Instructor permission required. In general, students will have an opportunity to work in breadth and depth with the various media of visual art. The portfolio aspect of this course is designed for seniors. Emphasis is placed on assembling a finished portfolio of art work which is worthy of presentation at a college or art school. Moreover, students will be responsible for applications to schools, letters of recommendation, and personal essays. In addition, students will develop strategies for a “professional” presentation of their work and talents. The studio aspect of the class encourages students to explore those areas of art which have not been a part of the curriculum. These include metal work, sculpture, oil painting, graphic, and photography. Students will be expected to participate in extracurricular art activities such as assembling art displays, designing projects for the school newspaper, posters, etc. and field trips. Furthermore, aspects of art history will be periodically introduced in the class.



### **SPECIAL COURSES AND PROGRAMS.**

#### **PEER LEADERSHIP (9995) Grade 12 5 Credits**

Modeling the Six Pillars of Character, The Old Bridge High School Peer Leadership Program provides students the opportunity to develop and practice leadership and action skills in a social setting, in an effort to mature into a catalyst for change. The course gives students the opportunity to develop awareness and understanding of social issues, problems, and resources, assisting students in using positive peer influence to promote a safe, supportive, and respectful educational environment. Social responsibility is integrated through provided community service initiatives promoting pro-social behavior. Exhibiting respect, peer leaders engage in interactive team building, problem solving, conflict resolution, and other pertinent life skills encompassing leadership qualifications. With increased self-esteem, student-led programs are applied to educate peers on relevant issues impacting the climate of both the school and community.

#### **ENGLISH AS A SECOND LANGUAGE PROGRAM Grades 9-12 (ENGLISH LANGUAGE LEARNERS)**

The English as a Second Language (ESL) program serves pupils whose native language is other than English and who have difficulty speaking, reading, writing, or understanding the English language.. Pupils are identified for the program in grades kindergarten through twelve through a rigorous screening process and are admitted into the program with parent approval. They are taught English vocabulary and structure using second language teaching techniques, incorporating the cultural aspects of the pupils' experiences in their ELL instruction. In grades nine through twelve, pupils receive a minimum of one class period of instruction. Students attend an ESL/ELL classes until they meet the state and district approved exiting criteria.

#### **THE ACADEMIC MENTORING PROGRAM Grades 9-12**

The Academic Mentoring Program is designed to provide supplemental academic support to the regular school program to improve the level of pupil proficiency in the basic skill areas of reading, writing, and mathematics. Specifically designed courses, with lower student teacher ratios, are provided for qualifying students at the high school level. Pupils enrolled in the program continue to receive services until it is determined that the necessary reading, mathematics, and writing skills are satisfactory for success in the mainstream setting. Parents are informed, by letter, of their child's eligibility of participation in the program.

#### **SPECIAL EDUCATION Grades 9-12**

The Department of Special Services provides appropriate special education and/or related services to all classified high school students. Many placement options are available to meet the needs of students in accordance with their individualized education programs (IEP). Student-teacher ratios are in compliance with State and Board of Education mandates for special education. Special education, which either supports or replaces regular education, may be provided in the academic areas in order for students to meet New Jersey State requirements for graduation.

#### **TRANSITION PLANNING (9907, 9910, 9911) Grades 9-12 5 Credits**

This elective course is designed to guide students with special needs to focus on appreciating and exploring personal interests, aptitudes, interpersonal communication and problem-solving skills, money management, and career or educational opportunities as they prepare for life after high school. Students will gain an understanding of relevant skills, forms, and techniques to improve their readiness for future employment, training, and/or education.

#### **TRANSITION PLANNING-SENIORS (9908, 9909, 9912) Grades 11-12 15 Credits**

This elective course is designed to guide students with special needs to focus on appreciating and exploring personal interests, aptitudes, interpersonal communication and problem-solving skills, money management, and career or educational opportunities as they prepare for life after high school. *This course does extensive job training with different businesses throughout the community allowing the students to improve their work experience.* Students will gain an understanding of relevant skills, forms, and techniques to improve their readiness for future employment, training, and/or education.



**LLD English (8869, 9867, 9868 & 9869)**
**Grades: 9-12**
**5 Credits**

The LLD English program facilitates developmental skills in the area of spelling, vocabulary, reading comprehension, grammar, writing, and meets the Language Arts graduation requirement for Old Bridge High School. This course provides an individualized approach into the topics of language arts instruction and technology is infused into the classroom. The material is implemented with appropriate adaptations and modifications to meet the individualized reading level and cognitive abilities of the special education student. Course materials are aligned with the general education curriculum in order to ensure student access to all curriculum based activities.

**LLD World History (8877)**
**Grade 9**
**5 Credits**

This is the first year of a three year sequence of courses to meet the Social Studies graduation requirement. This course of study develops a student's understanding of geography, governance, culture, and citizenship, while following specific sections of the World History curriculum. This course provides a more individualized approach to the topics of instruction in social studies and is implemented with appropriate adaptations and modifications to meet the individual reading and cognitive abilities of the special education student.

**LLD United States History I & II (9877 & 9878)**
**Grades 10-12**
**5 Credits**

The LLD United States History course provides a chronological/topical survey course of the US History from Colonization to the present. This course provides the students with a comprehensive overview of global, continental, and local issues that impact their lives. This class will utilize technology to differentiate instruction and provide topics aligned with the United States I and United States II History courses. This course provides an individualized approach to the topics of instruction in social studies and is implemented with appropriate adaptations and modifications to meet the individual needs and cognitive abilities of the special education student.

**LLD Math Skills (8889, 9888, 9889 & 9890)**
**Grades 9-12**
**5 Credits**

The LLD Mathematics program provides students with the skills needed to facilitate the development of life skills in the area of basic mathematical operations. Topics include a review of the base skills operations, including whole numbers, fractions, decimals, percents, and other necessary applications, including tables, graphs, measurements, perimeter, area, and volume. Computer application and problem solving in life-skill areas such as banking and budgeting are also infused throughout this course. Specific areas of Algebra and Geometry are also included based on the individualized levels of the students within the class. This course provides a more individualized approach to the topics of instruction in mathematics and is implemented with appropriate adaptations and modifications to meet the individual reading and cognitive skill abilities of the special education students.

**RP Consumer Mathematics (9914/9915)**
**Grades 12 and 12+**
**5 Credits**

This course will address students' personal finance skills. It provides skills that will help students manage finances in their post high school transition. Topics build on the LLD Mathematics courses and include an introduction to banking and the services that they provide, development and study of a personal budget, comparison shopping (online), and record keeping. LLD Consumer Mathematics provides students with the real-world skills necessary to transition them toward gaining financial knowledge prior to their post-high school transition. This course provides a more individualized approach to the topics of instruction in mathematics and is implemented with appropriate adaptations and modifications to meet the individual needs of the special education student.

**UNIFY GENERATION (9994)**
**Grade 12**
**5 Credits**
**Prerequisite:**

- Application required for Partners (Grade 12) who have been in Project Unify for at least two years, or Advisors' consent. Athletes in their senior plus years can be invited or suggested for the program by Advisor/coach, Teachers, CST or Administrators. Application will be distributed by the Project Unify Advisor.

Unify Generation work creates unique teamwork and bonds through a series of experiences. Students will explore, learn and practice together, skills needed to become positive teammates and effective leaders. Students will move forward and continuously promote the cause and educate others on tolerance and respect as positive role models in the Old Bridge School district as well as the community. Unify experiences will create a culture of inclusion and foster understanding among all Unify Generation class students. As an integral part of the year's work, all students will be required to read various readings, keep daily journals, participate united with sports activities aligned with New Jersey Special Olympics events.



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**APPENDIX A**  
**OLD BRIDGE HIGH SCHOOL**  
**4209 Route 516, Matawan, NJ 07747**  
**Counseling Department: Course Advancement Application**

Student's Full Name \_\_\_\_\_ Current Grade Level \_\_\_\_\_

Parent/Guardian Name \_\_\_\_\_

Address \_\_\_\_\_

Parent/Guardian Phone # \_\_\_\_\_ Parent/Guardian Email \_\_\_\_\_

Subject Area in which you hope to receive advancement: (Please check all applicable)

- ☐ Mathematics (120 hours)
- ☐ English (120 hours)
- ☐ Science (120 hours)
- ☐ Social Studies (120 hours)
- ☐ World Language (120 hours)
- ☐ Personal Finance (60 hours)

Old Bridge High Course being replaced/Course Number \_\_\_\_\_

Approved Educational Provider (Check one only) \_\_\_\_\_ Educere Core (www.educere.net)  
\_\_\_\_\_ Rutgers Preparatory School

Anticipated Start Date: \_\_\_\_\_ Anticipated End Date: \_\_\_\_\_

By signing below, I acknowledge the following:

- This course is being used for placement only and will not be reflected on my student's transcript from Old Bridge High School.
- Old Bridge High School staff cannot provide assistance towards the completion of this course.
- Course credit will only be provided with independent verification from Educere and/or Rutgers Preparatory School. Credit will only be given if the student receives a grade of at least a 83.
- Course placement will be determined by the final grade as provided Educere and/or Rutgers Preparatory School as outlined in the Old Bridge High School Course Offering Book.
- This form **MUST** be submitted to the guidance staff no later than June 1<sup>st</sup> prior to the summer of request.

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Parent / Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

**DISTRICT USE ONLY:**

Subject Supervisor Acknowledgement \_\_\_\_\_ Date \_\_\_\_\_

Guidance Counselor Acknowledgement \_\_\_\_\_ Date \_\_\_\_\_



## APPENDIX B OLD BRIDGE HIGH SCHOOL

4209 Route 516, Matawan, New Jersey 07747

### Course Placement Appeal

This form must be used and completed in its entirety for any program adjustment request. Students must provide a comprehensive rationale for this request. **This form must be completed prior to September 1 of the year of requested appeal.**

<b>Student Name:</b>	<b>Grade:</b>	<b>Counselor:</b>
----------------------	---------------	-------------------

<b>Date:</b>	<b>Request to move from:</b>	<b>Request to move to:</b>
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**Rationale for requested program adjustment (e.g. Evidence of grade improvement, strong interest in subject, etc):**

### Parent Approval

By signing below, I agree to the following:

- I am requesting that my child be placed in the course level listed above without meeting the Board of Education approved pre-requisites. I am aware that my child does not meet the rubric guidelines and pre-requisites for this course, based on prior grades and academic performance in the subject area.
- I understand that, if waiving to a higher level, Honors and Advanced Placement Courses are significantly more challenging than the recommended course and impose very significant reading responsibilities. The time commitment required of these courses is substantial, and all students must consider this when requesting a course waiver.
- I understand that administration must agree to this appeal request and further discussion might be necessary with the subject area supervisor and/or guidance counselor to elaborate on said request.
- **I understand that no course changes are permitted after the last day of the first marking period.**

Parent Signature \_\_\_\_\_ Date \_\_\_\_\_

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

### DISTRICT USE ONLY:

Guidance Counselor Signature \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ Approved \_\_\_\_\_ Not Approved (Check one)

Administrator Signature \_\_\_\_\_ Date \_\_\_\_\_



**APPENDIX C**  
**OLD BRIDGE HIGH SCHOOL**  
 4209 Route 516, Matawan, New Jersey 07747  
**Option II – High School Physical Education**

This form must be used and completed in its entirety for any program adjustment request. Students must provide a comprehensive rationale for this request. **This request is for RISING 12<sup>th</sup> graders ONLY.** This form must be completed prior to **September 15<sup>th</sup> of the year of requested course placement.**

Student Name:	Grade:	Counselor:	Date Received:

**Rationale for requested Option II:**

**Parent Approval**

By signing below, I agree to the following:

- My child must have a current GPA at or above a 3.0.
- My child must have received a Physical Education final grade of a 84 or above in the previous academic school year.
- My child will NOT be exempt from Drivers Education or Health.
- My child will be placed in the Option II Physical Education course for the 2023-2024 Academic School Year.
- I am aware that my child will need to choose a path listed below:
  - **Path A (for 12<sup>th</sup> graders):** Participation in two or more NJSIAA-recognized Varsity sports or two seasons of Varsity cheerleading at the high school, OR
  - **Path B (for 12<sup>th</sup> graders):** Participation in one NJSIAA-recognized Varsity sport or Varsity cheerleading at the high school, plus documented off-season-training (150 minutes/week) in the same sport/cheer with an organization approved by the principal
- Option II will result in a Pass/Fail grade at the end of each marking period of Physical Education
- Upon receiving approval for Option II, my child will be placed on early release or late arrival and must provide own transportation to and from school.
- Deadline to apply for Option II is September 15<sup>th</sup> of the year requested.

Parent Signature \_\_\_\_\_ Date \_\_\_\_\_

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

**DISTRICT USE ONLY :**

☐ Approved    ☐ Not Approved (Check one)

High School Coach Signature \_\_\_\_\_ Date \_\_\_\_\_

☐ Approved    ☐ Not Approved (Check one)

Guidance Counselor Signature \_\_\_\_\_ Date \_\_\_\_\_

☐ Approved    ☐ Not Approved (Check one)

Subject Area Supervisor Signature \_\_\_\_\_ Date \_\_\_\_\_



## APPENDIX D OLD BRIDGE HIGH SCHOOL

4209 Route 516, Matawan, New Jersey 07747

### OBHS/Middlesex College Early College Program Application

Student's Full Name: \_\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_

Address \_\_\_\_\_

Parent/Guardian Phone # \_\_\_\_\_ Parent/Guardian Email \_\_\_\_\_

To be eligible for the Middlesex College/Old Bridge High School Early College Program, Old Bridge students must:

- Meet the Middlesex College/OBHS Early College Program prerequisite course requirements
  - Successful completion of Algebra I during 8<sup>th</sup> grade (or complete Algebra I summer course prior to freshmen year or Geometry summer course prior to sophomore year)
  - Successful completion of Level I World Language during 8<sup>th</sup> grade (or complete Level 1 World Language summer course prior to freshmen year)
  - NOTE: Any summer course will be used for placement only and will not be reflected on student's transcript from Old Bridge High School/Middlesex College.
- Enroll in the approved courses at Old Bridge High School for all four years. See [ECP Four Year Course Plan](#) and page 9 for more information.
- Complete the enrollment process which includes submitting this application and course waiver forms as necessary to your child's school counselor by April 1, 2023.
- Pay tuition for each Middlesex College Dual Enrollment course. Students will be charged at the current discounted Early College Program tuition rate. For 2023-2024, rates are as follows: 3-credit course, 4-credit course, 3-credit course + 1 credit lab \$ 125.00 (each course). Middlesex College registration and tuition payment information will be provided during the first month of school.
- Earn at least a grade of "C" or better in the dual enrollment courses to receive college credit.
- Attend Middlesex College for at least five (5) courses (or 15 total credits) to be taken during the student's junior year (2 courses) and senior year (3 courses). Please note that the district cannot provide transportation to Middlesex College for these courses, and it will be the student/parent responsibility to arrange such transportation if necessary.

NOTE: All recorded grades will be available to students on a Middlesex College transcript.

Parent Signature \_\_\_\_\_ Date \_\_\_\_\_

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

#### DISTRICT USE ONLY:

School Counselor Signature \_\_\_\_\_ Date \_\_\_\_\_

Administrator Signature \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ Approved      \_\_\_\_\_ Not Approved (Check one)