# **NEW EGYPT HIGH SCHOOL**



# PROGRAM OF STUDIES 2024-2025

# **NEW EGYPT HIGH SCHOOL**

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#### **CHILD STUDY TEAM**

Mrs. Laura Bodrog, School Social Worker

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#### INTRODUCTION

The New Egypt High School Program of Studies has been prepared for you to use as a reference during the high school scheduling process. It is designed to assist you in mapping out an appropriate and rigorous academic program across all disciplines. New Egypt High School offers a variety of courses designed to meet the academic needs, interests and goals of the student body, while also addressing the New Jersey Student Learning Standards. In addition to a summary of NEHS courses, this program contains valuable information about NJ graduation requirements, program criteria, and student services.

Decision-making is an important part of the course selection process and therefore, offerings should be carefully reviewed in order to select the courses that will best meet your needs, interests and goals. Please utilize your school counselor, special education case manager (if applicable) and teachers to work together to assist you through the scheduling process. Please also refer to the NEHS School Counseling website for further information to assist you throughout the scheduling process.

#### **COURSE SELECTION PROCESS**

The scheduling process for the 2024-2025 school year will begin in April 2024. All students and parents/guardians should carefully review the Program of Studies. Pay close attention to the course descriptions and prerequisites for the courses that you plan to select. Students should consider their interests, abilities and goals as they choose their academic program for the next year. Students are encouraged to gather information from teachers, counselors, parents and administrators as they choose their courses for the 2024-2025 school year. Counselors will meet with students to discuss course selection, make informed decisions and select the course of study that best suits the needs of each student.

#### **SCHOOL COUNSELING PROGRAM**

School Counseling is a shared responsibility between the home and school and it is most effective when all work together. The main function of the counselor is to establish a relationship with the student that will help him/her make good decisions about his/her educational, social and career plans. The School Counseling Department also runs counseling groups for students throughout the school year.

#### CHILD STUDY TEAM

Our Special Services Department affords each student a positive and rewarding high school experience. New Egypt High School offers a wide range of courses designed to accommodate the special needs of our students with individualized education programs. The Child Study Team, as well as all counselors and all teachers, are available to help each student and his/her parent(s)/guardian(s) in the planning process to ensure a positive high school experience.

#### STUDENT ATTENDANCE

The Board of Education has established a strict student attendance policy regarding the withdrawal of courses, credits and excessive absences. Administrative action will also be taken for school/class cutting. Specific procedures for parents and students regarding attendance are written in the Student Handbook and are detailed further in Board of Education Policies and Regulations. These procedures will include what to do when students are absent, tardy or dismissed early.

#### **STUDENT SCHEDULE ADJUSTMENTS**

The following procedures take effect only after the <u>initial schedule request</u> is completed through the consultation of the student, parent/guardian and school counselors during the spring of the previous school year. These procedures are designed to regulate the process of making schedule changes in an orderly, efficient and timely manner.

- 1. A schedule change request for the upcoming year must be submitted in writing, prior to the start of each semester.
- 2. Students may seek a schedule change under the following conditions within one week from the start of each semester.
  - A required subject did not appear on the student's schedule.
  - The student has changed academic or career plans.\*
  - The student failed a subject (or subjects) in a previous year but made up the course work during summer school (as approved by the school counseling department.)

After dropping a course passed the one week drop deadline students will receive a Withdraw Pass (WP) or Withdraw Fail (WF) for the course.

\*\*In extreme cases exceptions to the above procedures may be implemented at the discretion of the high school administration\*\*

#### **NJSLA/NJGPA PREPARATION**

Students will be tested in language arts and math courses in grades 9 and 11. Students who perform below the minimum level of pupil proficiency in one or more areas of the state mandated NJSLA or NJGPA will receive remediation.

#### **EARLY RELEASE PROGRAM FOR SENIORS**

Students can obtain up to 6 Ocean County College credits per semester during their senior year in lieu of senior year electives. Students can have a reduced schedule in the senior year to attend college courses. The goal of this program is to give qualified high school students the opportunity to experience college courses and prepare for the academic rigor of college. Students must take their fourth year of English at New Egypt High School. **The following criteria must be met to participate in this program:** 

- The student must have a weighted GPA of 85 or higher
- The student must be on track with NJDOE and local graduation requirements
- The student must be in good standing with attendance and discipline

#### **ATHLETIC ELIGIBILITY**

Any student who wishes to compete in interscholastic sports must meet the minimum credit requirements established by the New Jersey Interscholastic Athletic Association. A student must have passed 30 credits in the previous year to be eligible for participation in sports offered in the fall and/or winter. To be eligible for sports offered in the spring, a student must have passed the equivalent of 15 credits in the fall semester. Any student 19 years of age prior to September 1st is not eligible to participate in interscholastic athletics. Any student 16

<sup>\*</sup> Adjustments to the above criteria may be implemented at the discretion of the high school administration

years of age prior to September 1<sup>st</sup> is not eligible to participate in freshman level interscholastic athletics. Fifth year students are not eligible for interscholastic competition.

#### **ACADEMIC RECOGNITION**

New Egypt High School is very proud of its students who distinguished themselves in their studies. This pride is reflected in various forms of recognition.

- **HONOR ROLL** To achieve honor roll status a student must earn an overall unweighted average of 81.00 in all subjects with no failing grades.
- **HIGH HONOR ROLL** To achieve high honor roll status except the student must earn an overall unweighted average of 91.00 in all subjects with no failing grades.

#### **NATIONAL HONOR SOCIETY**

Based upon scholarship, character, service and leadership.

- Scholarship The student must have an unweighted grade point average of 91 or better (equivalent to a 3.7 on 4.0 scale) and cannot have received a failing grade in any class. All classes must be at a college prep level or higher.
- Character and Leadership Rated by teachers and faculty council.
- Service Student participation in at least two activities and complete a minimum of 20 hours of community service
- Leadership-Rated by the teachers and faculty council.

#### **NEW EGYPT HIGH SCHOOL GRADING SYSTEM**

#### **MARKING SYSTEM**

- All grades are numerical
- Grades are in integers of 1 (0-100)
- Report cards are issued online quarterly
- Progress reports are issued online quarterly

#### **GRADING SCALE**

A = 90-100

B = 80-89

C = 75-79

D = 70-74

F = 69 and below

#### **TRANSFER STUDENTS**

- Transcript grades will be audited upon enrollment to New Egypt High School
- Students will receive a New Egypt High School unweighted and weighted GPA at the conclusion of their first year as a NEHS student
- Students' GPA from their previous school will not be averaged with their NEHS GPA

#### **HONORS & ADVANCED PLACEMENT (AP) CRITERIA**

#### **CURRENT NEW EGYPT HIGH SCHOOL STUDENTS:**

All students currently enrolled in, and passing, an honors or advanced placement course will be automatically enrolled in the next sequential course.

Any student who wishes to move from a college prep to honors course, or an honors course to an advanced placement course, will have to demonstrate success by having a **final average of a 90 or above**. Student grades will be reviewed at the end of the year for placement.

#### **INCOMING 9TH GRADE STUDENTS:**

All incoming 9th grade students who wish to enroll in honors level coursework during their 9th grade year will be selected by using the following placement criteria:

#### **MATH & SCIENCE:**

- Cognitive skills average in 8th grade Math & Science
- Content grade in 8th grade Math & Science
- A student in 8th Grade Math will move to Algebra I in 9th grade.
- A student in Algebra I in 8th grade will move to Geometry or Geometry Honors in 9th grade.

#### **ENGLISH & SOCIAL STUDIES:**

- Cognitive skills average in 8th grade English
- Lexile level from iReady
- Content grade in 8th grade English & Social Studies
- Writing Task

#### **ADVANCED PLACEMENT (AP) PROGRAM:**

The Advanced Placement Program is a rigorous academic program built on the commitment, passion, and hard work of students and teachers. The Advanced Placement Program allows students to participate in a college level course and possibly earn college credit while still in high school. Advanced Placement courses are available to students in grades 9-12. Advanced Placement courses require summer work. Schedule changes will not be made due to the fact that the students have not completed his/her summer work responsibility. All students enrolled in Advanced Placement courses are required to take the Advanced Placement Examinations in May.

- Students cannot add an AP course to their schedule after August 1st
- Students who take the AP Exam will be exempt from the final exam
- Students who do not take the required AP Exam in May will receive Honors credit for the course with a notation on his/her transcript indicating that the student did not fulfill the AP requirement (GPA will be impacted).

It is expected that students who enroll in AP classes take the AP exams and pay for the cost of the test. Financial aid is available for those with documented financial hardship. If choosing not to take the AP exam, students will receive only Honors credit for the class.

#### **NEW EGYPT HIGH SCHOOL**

# GRADUATION REQUIREMENTS SUBJECTS & CREDITS REQUIRED BY NJDOE/NEHS

#### **GRADUATION REQUIREMENTS**

Graduation requirements, as defined by law, fall into three categories – number of credits, courses required and attendance requirements.

#### **CREDITS**

- 1. Students must select 40 credits each school year (Exceptions require administrative approval)
- 2. One hundred and thirty (130) credits are required for graduation.
- 3. All required courses must be passed in proper sequence.
- 4. Additional GPA weight is afforded honors and AP courses.
- 5. No student may participate in graduation unless all requirements have been met.
- STUDENTS MUST MEET THE NJSLA/NJGPA (Formerly PARCC) REQUIREMENTS OR OTHER STATE APPROVED OPTIONS IN ORDER TO GRADUATE. THIS TEST IS THE STATE GRADUATION REQUIREMENT.

SUBJECTS/SUBJECT AREAS	CREDITS REQUIRED	
ENGLISH	20	
MATHEMATICS	15	
PHYSICAL EDUCATION/HEALTH I, II, III, IV	20	
SCIENCE	15	
SOCIAL STUDIES	15	
WORLD LANGUAGE	5	
FINE ARTS (VISUAL & PERFORMING ARTS)	5	
PRACTICAL ARTS (CAREER EDUCATION, CONSUMER, FAMILY, & 21st CENTURY LIFE SKILLS)	<b>5</b>	
PERSONAL FINANCE/ECONOMICS	2.5	
COLLEGE & CAREER READINESS	5	
ELECTIVE(S)	22.5	
TOTAL CREDITS REQUIRED FOR GRADUATION: TESTING REQUIRED FOR GRADUATION: PASSING SCORE in ELA ar	130 nd MATH CATEGORIES	

Students not planning to attend 4-year colleges must concentrate on fulfilling the graduation requirements. They are free to pursue electives of interest beyond the requirements. Credits must total 130 minimum. Even if students are planning to attend 2-year colleges, it is STRONGLY recommended that they follow the 4-year college course sequence

SUBJECT AREA	MINIMUM COLLEGE REQUIREMENTS	COMMENTS
English	4 years	
Mathematics	3 years including: Algebra I Geometry Algebra II	4 years of mathematics is preferred and may be required for entrance into competitive colleges and/or certain majors, including engineering, science and architecture
Science	3 years of Lab Sciences Biology Chemistry Physics	4 years of science is preferred and may be required for entrance into competitive colleges. Physics may be required for certain majors, including engineering, science and architecture.
Social Studies	3-4 years World History US History I US History II	
World Language	2 years	Most colleges/universities require a two year minimum of a single world language. 3 or more years of study is recommended for admission to competitive colleges

#### OCEAN COUNTY VOCATIONAL TECHNICAL SCHOOLS

The Ocean County Vocational-Technical Centers consist of five sites. Each center offers varied, comprehensive, practical arts programs to meet the diversity of interests of its participating students. The centers provide essential reading and math skills necessary for success in the world of work. In addition to providing an abundance of career choices and relevant academics, the centers also have career counselors who maintain communication with counselors here at New Egypt. Students participating in the vocational-technical program are juniors and seniors. Candidates must demonstrate good attendance, academic record, and disciplinary record. Admissions criteria will not be based on gender or ethnicity. For a complete list of OCVTS programs and course offerings please visit their website.

#### **SPECIAL EDUCATION AND RELATED SERVICES**

#### PLACEMENT DESCRIPTIONS

As per N.J.A.C. 6A:14-4.3, the district will provide a full continuum of placements to meet the needs of students with disabilities. Programs provided depend upon the individual needs of the identified students. The starting point for each student will be the regular education classroom. When the district can only educate a student with supplementary aids and services will a more restrictive placement be taken into consideration. Supplementary aids and services shall include but not be limited to:

- Curricular or instructional modifications
- Supplementary instruction
- Assistive technology devices and services
- Paraprofessionals
- Related services (Including but not limited to: Occupational therapy, Physical therapy, Speech/language therapy, Adaptive physical education)

#### **RESOURCE PROGRAMS (ALL BUILDINGS)**

As per N.J.A.C. 6A:14-4.6(e), in a support services program, the student shall meet the regular education curriculum requirements for the grade or subject being taught. Modifications to the instructional strategies or testing procedures may be provided, and, if provided, shall be provided in accordance with the student's IEP.

#### REPLACEMENT RESOURCE PROGRAMS (ALL BUILDINGS)

Replacement classes are conducted in a small group setting. As per N.J.A.C. 6A:14-4.6(f), the regular education curriculum and strategies designed to allow access to that curriculum are modified based upon the IEP. These classes address one content area at a time.

#### **SELF-CONTAINED (ALL BUILDINGS)**

As per N.J.A.C. 6A:14-4.7(a), a self-contained classroom serves students with similar educational needs. Instruction is individualized based on the needs of the student. The focus is on the practical application of curricular standards in language arts/reading, social studies, math, and science. This program highlights the importance of learning life skills along with social skills and will help students generalize their skills to real-world situations. The age span in a self-contained classroom may not exceed four years.

#### EXTENDED SCHOOL YEAR PROGRAM (ALL GRADE LEVELS)

As a result of the annual review process, some students may be recommended to attend the Extended School Year (ESY) program. This program is a 4-week program held during the summer. As per N.J.A.C. 6A:14-4.3(b), the purpose of the program is to prevent student regression that would be a result of extended time away from the learning environment. Related services are also offered during the ESY program as determined by the IEP team.

#### **RELATED SERVICES (ALL BUILDINGS)**

As per N.J.A.C. 6A:14-3.9, related services include any transportation, developmental, corrective or supportive services required to assist a child with a disability to benefit from special education. The most common types of related services offered in a school district are: occupational therapy, physical therapy, speech/language therapy, adaptive physical education and counseling. However, based upon IEP needs, it may be determined that a student requires further services such as specialized equipment for transportation,

school health services, and orientation/mobility services. Further descriptions of these services can be found in Appendix B of N.J.A.C. 6A:14.

An overview of the main related services:

- Occupational Therapy: Services are provided by a licensed occupational therapist. The therapist works with the child on improving independent functions lost due to illness, injury, disability or deprivation, as well as on prevention of further loss.
- Physical Therapy: Services are provided by a licensed physical therapist. The therapist works with the child on improving mobility and motion.
- Speech/language services: Provided by a licensed speech/language therapist. The therapist works with students with articulation issues and provides for the habilitation or prevention of speech and language impairments.

#### **WARRIOR ACADEMIES**

New Egypt High School offers five academies developed to provide a strong educational foundation for academically gifted students planning to pursue careers within the fields of those particular academies. Students are permitted to apply to Warrior Academies in their 8th and 9th grade years.

Currently we offer the academies listed below. Please click on the link for detailed information.

- Business Academy
- Engineering Academy
- Law & Justice Academy
- Global Education Academy

# **ART EDUCATION**

The Art Department offers students the opportunity to explore the fine arts and applied arts. The major emphasis in the Art program is to develop concepts and skills through the beginning levels that will allow students to become creative problem solvers. As students reach more advanced art levels there will be an emphasis on portfolio development.

**ART701** 

**ART I -** This course is designed for any student who has had no previous experience in a high school level art course and is the only art course open to 9<sup>th</sup> grade students. The course offers students a means to express ideas creatively through the art elements of line, shape, form, value, texture, and color. This course will provide students with a way to acquire the basic skills needed to further study and practice.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

**ART702** 

**ART II -** This course is designed for sophomores through seniors who wish to continue their study of art through experiences in a variety of media. It is geared to the student who desires to develop his/her personal interests for future vocational or leisure time creativity.

PREREQUISITE: ART701 GRADE: 10-12 LENGTH: SEMESTER CREDIT: 5.0

**ART703** 

**ART III -** Students will continue their study of art technique and knowledge, with an emphasis on more advanced art concepts. Portfolio development will be emphasized for those who wish to pursue art as a career.

PREREQUISITE: ART702 GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

**ART704** 

**ART IV** - This course is geared more towards the college bound art student, but may be taken by anyone with a strong interest in the fine arts. Focusing on building your personal portfolio of work and projects designed to enhance personal skill and growth. Art IV will cover a wide variety of topics important for those that are seeking college acceptance in the arts.

PREREQUISITE: ART703 GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

**ART801** 

**ART & DESIGN IN ENGINEERING -** Students will have the opportunity to combine core engineering skills with art and technology concepts used in the special effects industry. The elements and principles of design will be thoroughly explored using an array of art media. Students will apply the engineering design loop to create projects in animatronics, stop motion, and more.

PREREQUISITE: NONE GRADE: 10 - 12 LENGTH: SEMESTER CREDIT: 5.0

# **BUSINESS/TECHNOLOGY EDUCATION**

The Business/Technology Department offers a variety of programs that provide students with the opportunity to receive the greatest depth of knowledge in all areas of business. With career orientation in all course offerings, students should develop job entry-level skills. At the same time, course offerings will attempt to prepare college-bound students who wish to pursue future business careers.

#### BUS/TEC805

**COMPUTER APPLICATIONS-** The goal of this course is to develop practical computer skills. Students will be given real world challenges that allow them to expand their applicable knowledge of modern computing. Students will learn formatting techniques for creating dynamic documents, presentations, and spreadsheets. Students will also gain a more expansive knowledge of data analytics using both user generated data and publicly available databases.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: QUARTER CREDIT: 2.5

#### BUS/TEC806

**PERSONAL FINANCE/ECONOMICS** - By learning the basic concepts of economics; money management; credit and debt management; planning, saving and investing; becoming a critical consumer; risk management and insurance; and civic financial responsibility, students stand a greater chance of being financially sound and a productive member of society. This course includes the application of knowledge, skills, and ethical values necessary for making consumer and financial decisions that impact one's self, one's family, and local and global communities. This course meets the state requirement of 2.5 credits in financial literacy and is designed to teach students the skills necessary to effectively manage personal finances by the time they graduate.

PREREQUISITE: NONE GRADE: 10-12 LENGTH: QUARTER CREDIT: 2.5

#### BUS/TEC840

**INTRODUCTION TO MEDIA PRODUCTION -** This course provides a technical foundation for media production. Students learn the basics of camera, audio and editing through the creation of media projects including interviews, commercials and music videos.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: QUARTER CREDIT: 2.5

#### BUS/TEC841

**INTRODUCTION TO LOCATION PRODUCTION** - This course introduces students to the procedures used in the television industry for the production of content outside of the studio environment. Students learn the techniques used by electronic journalists, and practice these skills through the production of segments for the NEHS News Show. Students are also introduced to live multi camera event production and single camera film production. A course requirement is working on the production of after school events (such as sporting events, school play, concerts)

PREREQUISITE: BUS/TEC840 GRADE: 9-12 LENGTH: QUARTER CREDIT: 2.5

#### BUS/TEC842

**STUDIO NEWS PRODUCTION** - Studio News Production will focus on the production of a Daily News Show. Students will learn to perform all tasks needed for the production of a news show including Directing, Technical Directing, Audio, Camera, Floor Manager, Graphics, and Teleprompter. The program will be broadcast each day to the school, and also posted to various social media platforms for the community. Students will also write and produce other studio based programs such as talk shows and sitcoms.

PREREQUISITE: BUS/TEC840&841 GRADE: 10-12 LENGTH: SEMESTER CREDIT: 5.0

#### BUS/TEC850

**INTRODUCTION TO BUSINESS -** This course provides an overall picture of business operations and a thorough survey of the activities that make up the field of business. Specialized fields within business organizations are analyzed and emphasis is placed on such topics as ownership management, organization, purchasing, marketing, production, personnel, finance, and government regulations.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

#### BUS/TEC855

**PRINCIPLES OF MARKETING -** Marketing challenges students to apply skills to a variety of activities centered on the 7 Functions of Marketing: management, finance, personal selling, promotion, distribution, pricing, and product. Students will develop assignments and projects that authentically assess learned skills, some of which are: creating a sales presentation, shooting a television commercial, writing a business plan, and developing various advertising print media. Students utilize productivity software as well as engage in research and participation through the internet, throughout the course.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

#### BUS/TEC864

**TECHNICAL PERSPECTIVES OF FILM DEVELOPMENT -** This course will introduce students to the technical perspective of filmmaking throughout the decades and genres. Hands-on film creations, participation in class discussions, and editing, with the main focus on techniques in filmmaking, will be the requirements of this course.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: QUARTER CREDIT: 2.5

#### BUS/TEC860

**ACCOUNTING 1 -** This course provides a foundation for understanding, and properly applying, the Generally Accepted Accounting Principles necessary to keep accurate business records. It is intended to develop critical thinking and problem solving skills necessary to work with financial information. Instruction will encompass an entire accounting cycle and the following areas will be included: principles of debit and credit, analysis and application of journals, ledgers, financial statements, and other accounting records.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

#### BUS/TEC865

**BUSINESS LAW** - Business law aims to give the student a basic understanding of both a person's legal rights and legal responsibilities. After a basic introduction to the law and our legal system, the course will emphasize the many aspects of contract and consumer law as applied to various business situations. Warranties, employment, consumer purchasing and credit, and criminal law are topics also covered.

**PREREQUISITE:** NONE **GRADE:** 9-12 **LENGTH:** QUARTER **CREDIT:** 2.5

#### BUS/TEC870

**INTERNATIONAL BUSINESS** - This course will provide students with the foundation necessary to understand International Business and the various aspects of conducting business in a global economy. Students will learn the foundational concepts of international business and finance while developing practical personal skills.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 2.5

#### BUS/TEC880

**INVESTING** - Investing and the Stock Market is designed to introduce students to personal investment options. The course will delve into topics involving investing and savings, and familiarize students with key investment terminology.

**PREREQUISITE:** NONE

**GRADE:** 9-12

**LENGTH:** SEMESTER

**CREDIT:** 2.5

### **ENGINEERING EDUCATION**

**STEM100** 

**TECHNOLOGY AND SOCIALLY RESPONSIBLE ENGINEERING** - Students will be introduced to areas of the designed world and how humans use technology to implement change. Students will gain proficiency in the use of various rapid prototyping tools (3D Printers, Laser Cutter) as well as traditional material processing tools. Students will design within real world constraints and will develop techniques for analyzing their material usage that increase efficiency and reduce waste.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

**STEM110** 

**INTRODUCTION TO COMPUTER SCIENCE** - This course will serve as an introduction to programming and microcontrollers. Students will gain a working knowledge of C/C++, the Arduino board and how the integration of sensors can assist us in our daily lives. Hands on experimentation will allow students to develop and test prototypes that address real world problems.

**PREREQUISITE:** NONE **GRADE:** 9-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

**STEM120** 

**INTRODUCTION TO ROBOTICS** - This course is an introduction to Robotics class. It teaches students to apply engineering principles and practices to design, construct, program, and operate a mobile robot. Students will utilize the VEX robotics platform and various sensors to address design challenges. This course will allow students to gain hands-on experience building task specific mobile robots and automating their behavior using basic computer programming skills.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

**STEM130** 

**ELECTRONICS** - Electronics is designed to be a full year introductory course for students who wish to further understand how electricity and electronic devices impact our world. The course will expose students to both theory and hands-on activities. Students will learn about safe practices concerning electronics, basic circuits, and components, reading and interpretation of schematic diagrams, testing of electronic circuits and devices, construction of analog and digital electronic circuits, robotic applications as well as possible career directions.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

**STEM140** 

**MATERIALS PROCESSING** - Students will be exposed to various methods of materials processing with wood, metals and plastics.

PREREQUISITE: NONE GRADE: 10-12 LENGTH: SEMESTER CREDIT: 5.0

**STEM210** 

**ADVANCED COMPUTER SCIENCE** - This course will serve as a continuation and expansion on the information covered in Introduction to Computer Science. Students will explore the Raspberry Pi microcontroller and the python programming language while designing computer applications. Students will be able to apply knowledge learned to designing their own stand alone computer applications.

PREREQUISITE: STEM110 GRADE: 10-12 LENGTH: SEMESTER CREDIT: 5.0

#### **STEM802**

**DIGITAL DESIGN** - Students will learn to utilize digital design tools in a hands on class that allows them to meet the needs of the school community. Students will assist in creating aesthetically appealing promotional materials that support district schools, clubs and sports. Students will also learn techniques for managing the workflow of a digital design project. Students will utilize Adobe CC for creative elements and explore various solutions for time and product management.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

# **ENGLISH**

The main goal of the NEHS English program is to improve oral and written communication skills. Course work is designed to help students express their thoughts logically and coherently and to expand their abilities to understand the thoughts of others.

Requirements for Graduation: Four years of English and passing of the NJSLA/NJGPA or other testing options

**ENG402** 

**ENGLISH I COLLEGE PREP** - English I College Prep is designed for students looking to continue their development of writing and analysis through the use of various pieces of literature. Throughout the duration of this course, there will be an emphasis placed on various writing techniques such as literary analysis, narrative writing and synthesis through the use of non-fiction and fiction. Students will read compelling pieces of literature including novels, short stories, works of non-fiction and a work of drama. Additionally, students will address a variety of different skills that they can use across all courses, and take with them post-high school.

PREREQUISITE: NONE GRADE: 9 LENGTH: SEMESTER CREDIT: 5.0

**ENG404** 

**ENGLISH I HONORS** - This course is designed for the accelerated English I student. The course provides an in-depth study of the elements of literature exploring various pieces of literature from the classics, to non-fiction to William Shakespeare's infamous works. The writing component of this course includes an extensive practice in daily writing including expository writing, literary analysis, and narrative writing. Additionally, the course will have a steady focus on specific skills such as annotation, close reading, synthesis, and the study of advanced vocabulary, literary terms and devices, and proper grammar. Students enrolled in this course will complete various independent reading assessments during the year in conjunction with each individual unit

PREREQUISITE: PLACEMENT CRITERIA GRADE: 9 LENGTH: SEMESTER CREDIT: 5.0

**ENG412** 

**ENGLISH II COLLEGE PREP** - This course is designed for highly motivated and capable students. It emphasizes the writing process, focusing particularly on revision and editing. Narrative, literary analysis, argumentative and synthesis writings are addressed. The study of literature includes novels, dramas, speeches and short stories.. Participation in Socratic Seminars and Podcast creation is required. Literary elements will be studied and used in student work.

**PREREQUISITE:** NONE **GRADE:** 10 **LENGTH:** SEMESTER **CREDIT:** 5.0

**ENG414** 

**ENGLISH II HONORS** - This course is designed for the accelerated English II student. It will provide each student with an in-depth study of literary elements and structure of all genres of literature, including the short story, fiction novels, and nonfiction literature. The students will be required to complete extensive writings as well. Writing assignments will range from paragraph to complete essay, from creative to critical, from the narrative to the synthesis. Extensive studies in both grammar and vocabulary are stressed. In addition, both summer reading and extensive supplemental, independent reading are required. Independent research on literary analysis will be evaluated through paper and presentation. Student participation in Socratic Seminars, blogs, and podcasts is required.

**PREREQUISITE:** English I Honors or CP with ≥ 90% average

**GRADE:** 10 **LENGTH:** SEMESTER **CREDIT:** 5.0

#### **ENG422**

**ENGLISH III COLLEGE PREP** - This course is designed for highly motivated and capable students. It is platform based, curriculum steeped in language and compositional tasks that are accomplished through nonfiction focus areas including rhetoric, claims, appeals, audience and purpose, and evidence. All areas are evaluated through content assessments and projects that account for auditory, visual, and tactile learning modalities. Summer reading, independent reading, and multiple research papers are required.

PREREQUISITE: NONE GRADE: 11 LENGTH: SEMESTER CREDIT: 5.0

**ENG424** 

**ENGLISH III HONORS** - This course is designed for the accelerated English III student. The student will study genres, which include the novel, the short story, poetry, drama, and non-fiction. In addition, the student will be expected to write effective compositions, which contain sophisticated syntax and diction, accurate grammar and astute literary analysis. English III Honors also includes vocabulary studies and grammar concepts that appear with high frequency on the SAT. Summer reading assignments, extensive supplemental reading and a research paper are required.

**PREREQUISITE:** English II Honors or CP with ≥ 90% average

**GRADE:** 11 **LENGTH:** SEMESTER **CREDIT:** 5.0

**ENG432** 

**ENGLISH IV COLLEGE PREP** - This course is designed for highly motivated and capable students. It is platform based, curriculum steeped in language and compositional tasks that are accomplished through fiction and poetry focus areas including structure and form, figurative language, dramatic form, and point of view. All areas are evaluated through content assessments and projects that account for auditory, visual, and tactile learning modalities. Summer reading, independent reading, and multiple research papers are required.

PREREQUISITE: NONE GRADE: 12 LENGTH: SEMESTER CREDIT: 5.0

**ENG434** 

**ENGLISH IV HONORS** - This course is a fast paced literary journey through world literature. It is prepared with collegiate level students in mind. The class will focus on an in-depth study of poetry, short stories, novels, and plays. Class work will revolve around skills in critical reading, literary analysis, in class writing, quarterly projects, and research based essays on the literature studied. Summer reading (2 books), independent reading and research paper required.

**PREREQUISITE:** English III Honors or CP with ≥ 90% average

**GRADE:** 12 **LENGTH:** SEMESTER **CREDIT:** 5.0

**ENG450** 

**ADVANCED PLACEMENT ENGLISH LANGUAGE & COMPOSITION** - The AP English Language and Composition course aligns to introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.

**PREREQUISITE:** English II Honors with ≥ 90% average

**GRADE:** 11 **LENGTH:** SEMESTER **CREDIT:** 5.0

#### **ENG440**

**ADVANCED PLACEMENT ENGLISH LITERATURE & COMPOSITION** - This course is a fast paced literary journey through world literature. It is prepared with collegiate level students in mind. The class will focus on an in-depth study of poetry, short stories, novels, and plays. Class work will revolve around skills in critical reading, literary analysis, in class writing, quarterly projects, and research based essays on the literature studied. It is expected that students will take the AP exam in literature and composition in May. Those scoring a three or better can earn three to six college credits depending on the university. Summer reading (3 works), independent reading, and a research paper required.

**PREREQUISITE:** AP English Language or OCC English 151

**GRADE:** 12 **LENGTH:** SEMESTER **CREDIT:** 5.0

#### **ENG500**

JOURNALISM - Within this course, students will take an in-depth look at the history of journalism starting from the printing press to how social media has shaped journalism today. Students are introduced to the historical importance of journalism in America. Additionally, students will learn about page makeup, layout, headline writing, advanced interviewing, and layout terminology, and take on different roles as the editor, reporter and photographer. Students enrolled in the course will study the basic principles of print and online journalism as they examine the role of printed news media in our society. Students will conduct interviews, research, write, and design their own publications, including a monthly newsletter that they will publish for the school. The fundamental skills of a journalist will be stressed, including research and interviewing, fact-checking and attribution, style and persona.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

#### **ENG510**

**FILM ANALYSIS** - This class will introduce students to the history of cinema through the study of classic and contemporary films with a heavy component on writing reviews and analyses. Emphasis will be placed on exposing the class to a wide variety of styles and genres as well as formulating and justifying criticisms of the works. Hands-on projects, participation in class discussions, and a heavy focus on writing analysis will be requirements for successful completion of the course.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: QUARTER CREDIT: 2.5

#### **ENG530**

**LITERATURE STUDY OF DIVERSITY IN AMERICA** - Using literature, students will be exposed to and analyze the ways in which diverse "cultures" in America create and transform individual experiences, everyday life, social relations and power, including the effects on politics, law, and social norms.

PREREQUISITE: NONE GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

#### **ENG540**

**ENGLISH 151 (OCC DUAL ENROLLMENT)** - Students compose and revise expository essays totaling 3500 words, minimum. Through a series of primarily text-based writing assignments, the course reinforces and stresses the further development of critical reading and thinking, ethical reasoning, the writing process, and information literacy. (3.0 College Credits)

**PREREQUISITE:** English II Honors with ≥ 90% average

**GRADE:** 11 **LENGTH:** SEMESTER **CREDIT:** 5.0

#### **ENG541**

**ENGLISH 152 (OCC DUAL ENROLLMENT)** - This course introduces students to the study of fiction, poetry and drama, and requires written assignments (totaling 3,500 words, minimum), including at least one documented essay, that build on the writing and research skills developed in ENGL 151. (3.0 College Credits)

**PREREQUISITE:** OCC English 151 or AP English Language

**GRADE:** 12 **LENGTH:** SEMESTER **CREDIT:** 5.0

#### **ENG550**

**PRACTICAL EDUCATIONAL PRINCIPLES (PEP)** - Principles in Education will consist of the following coursework and information: It will explore the history of education, teaching, and pedagogy through major chronological movements including 1772 to the late 18th Century, The Common School Era, Feminization/ Women's Experience in the Classroom, Americanization, Progressivism, Social Equality, and Present Trends. Units will also focus on the similarities and differences between teaching and social work, a general overview of what social work is, and how social work is apparent in a variety of offshoot fields related to teaching and education.

**PREREQUISITE:** NONE **GRADE:** 9-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

# HISTORY/SOCIAL STUDIES

The Social Sciences & History department offers students a variety of courses in history and the social sciences. State law mandates that all students are required to complete two years of United States History and one year of World History with passing grades prior to graduation.

Requirements for Graduation: 1 year World History and 2 years United States History

**SS301 WORLD HISTORY COLLEGE PREP** - World History – CP is designed for students who intend to pursue a college education. Significant themes and events in world history are explored, and the impact of each on the development of civilization is examined and discussed. The diversity of world cultures and their effects throughout the non-western and western world are addressed. Independent research and writing are required. This course meets the world history graduation

requirement.

PREREQUISITE: NONE GRADE: 9 LENGTH: SEMESTER CREDIT: 5.0

**SS302 WORLD HISTORY HONORS** - This course is designed for the advanced ninth grade student. It emphasizes events, which have shaped the contemporary world. Non-western and western history is addressed. Significant themes and events in history and the impact of each on the development of the world are discussed. The contributions of important people in history are included. Intellectual, cultural, political, economic and social histories are integral components of the curriculum. Independent research and writing are required. This course meets the world history graduation requirement.

PREREQUISITE: PLACEMENT CRITERIA GRADE: 9 LENGTH: SEMESTER CREDIT: 5.0

U.S. HISTORY I COLLEGE PREP - United States History I is a study of the American experience from Jeffersonian Democracy through the late 19<sup>th</sup> century, and is a required course for graduation. Students will investigate the development of the United States' social, economic and political institutions. US History I begins the development of skills, behaviors, and knowledge necessary to train students for active citizenship in our society. Independent research and writing are required

PREREQUISITE: \$\$301 GRADE: 10 LENGTH: SEMESTER CREDIT: 5.0

**U.S. HISTORY I HONORS** - This course is designed for advanced tenth grade students covering the history of the United States from the creation of the Constitution through the American Civil War and into Reconstruction. Abstract level of study and thought is emphasized. Research and utilization of primary sources is a major aspect of this class. Proficiency in reading and written expression is necessary. Independent research and writing are required. This course meets the U.S. History I requirement.

**PREREQUISITE:** WH Honors or CP with ≥ 90% average

GRADE: 10 LENGTH: SEMESTER CREDIT: 5.0

**U.S. HISTORY II COLLEGE PREP** - This course is designed for students who intend to pursue a college education. The course covers the American experience from the beginning of the twentieth century to the Modern era, with students investigating American social, political, economic, military, and political institutions. U.S II furthers the development of skills, behaviors,

and knowledge necessary to train students for active citizenship in our society. This course meets the U.S. History II graduation requirement.

PREREQUISITE: \$\$311 GRADE: 11 LENGTH: SEMESTER CREDIT: 5.0

**U.S. HISTORY II HONORS** - This course is designed for 11<sup>th</sup> grade students who show advanced interest and capability in United States History. The course covers the American experience from Reconstruction to the modern era. An abstract level of study and thought is emphasized. Proficiency in reading and written expression is necessary. This course meets the U.S. History II graduation requirement.

**PREREQUISITE:** USI Honors or CP with ≥ 90% average

**SS322** 

**SS308** 

**GRADE:** 11 **LENGTH:** SEMESTER **CREDIT:** 5.0

ADVANCED PLACEMENT UNITED STATES HISTORY - This course is designed for advanced 11th & 12th grade students and covers history from Pre-Columbian times through the modern era. It is taken in place of U.S. History II Honors. Abstract level of study and thought is emphasized. Proficiency in reading and writing is required, along with the completion of two units over the summer. The Advanced Placement Program (AP) enables students to complete college-level studies while they are still in high school and to obtain college placement or credit, or both, on the basis of their performance on rigorous AP Examinations.

**PREREQUISITE:** USI Honors or CP with ≥ 90% average

**GRADE:** 11-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

SS306 CRIMINAL JUSTICE: COMPONENTS OF THE LEGAL SYSTEM IN THE UNITED STATES - How do governments control crime and impose penalties on those who violate them? This course will offer students an overview of the local, state and federal systems in which crimes and criminals are detected, detained, tried and punished. Students will learn about the different components and inner workings of these systems and the agencies, processes, and people that are part of them.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

SS307 CIVIL LIBERTIES & THE WOMEN'S RIGHTS MOVEMENT - In 1848 a women's rights convention was held in Seneca Falls, New York. In 1923, the first version of an Equal Rights Amendment was introduced: "Men and women shall have equal rights throughout the United States and every place subject to its jurisdiction." Forty-nine years later in 1972, Title IX of the Education Amendments was passed prohibiting sex discrimination in all aspects of education programs that receive federal support. Students will examine events along this timeline as a foundation to analyze the current status of women's rights in the US around the world

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

**TOURING OUR EMBATTLED PAST: A SURVEY OF AMERICAN MILITARY -** This course examines the evolution of various topics such as weaponry, medicine, tactics, intelligence, and more from the American Revolution through the War on Terror. The class has been created to allow for students with a basic knowledge of these topics, as well as those looking to dive deeper into our nation's military past. Students should be proficient in researching primary and secondary sources, as well as activities that involve first-hand accounts throughout each of the wars.

PREREQUISITE: NONE GRADE: 11-12 LENGTH: QUARTER CREDIT: 2.5

**SS310** 

**THE HISTORY OF BASEBALL AND AMERICAN POP CULTURE -** Students who would like a deeper and detailed understanding of social, economic, and political areas of American History examined through the study of baseball should enroll in this class. This course will view the growth of our country a decade prior to the Civil War up until the present day while intertwining the birth, evolution, and impact of baseball as our national pastime. Topics to be discussed include but are not limited to, "Civil War & Origins of the Sport", "Leagues and Professionals Emerge", "Political and Baseball Scandal", "Baseball, Big Business, and the Roaring Twenties", "The Great Depression & the Struggle to Survive", "World War II, A Call to Duty", "Jackie Robinson and the Civil Rights Movement", "Curt Flood: Impact of Free Agency", "The Steroid Stain", "Our National Pastime Invites the World

PREREQUISITE: NONE GRADE: 11-12 LENGTH: QUARTER CREDIT: 2.5

**SS323** 

**GENERAL PSYCHOLOGY (OCC DUAL ENROLLMENT)** - This introductory course introduces students to the basic concepts of psychology. Students will explore and understand the origins and goals of psychology, become familiar with various theories concerning psychological development, and explore the human psyche. (3.0 College Credits)

PREREQUISITE: NONE GRADE: Adv 10th graders & 11-12 LENGTH: SEMESTER CREDIT: 5.0

**SS324** 

**INTRODUCTION TO SOCIOLOGY (OCC DUAL ENROLLMENT)** - This elective course is designed to help the students better understand why human beings behave the way that they do in society. Students will learn how to take a sociological point of view in order to examine sociological research, culture, socialization, deviance, and social inequality. This course is largely project and discussion based, and will include college-level readings. (3.0 College Credits)

PREREQUISITE: NONE GRADE: Adv 10th graders & 11-12 LENGTH: SEMESTER CREDIT: 5.0

**SS370** 

**ADVANCED PLACEMENT U.S. GOVERNMENT & POLITICS** - AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments.

PREREQUISITE: PLACEMENT CRITERIA GRADE: 12 LENGTH: SEMESTER CREDIT: 5.0

# **MATHEMATICS**

Requirement for Graduation: Three years of Math and passing of the NJSLA or other testing options

MTH200 FUNDAMENTALS OF MATHEMATICS - This course will be taken along with Algebra I for students

who need review of fundamental math concepts to be successful in future math classes. In this

course, students explore the tools and principles of algebra.

PREREQUISITE: NONE GRADE: 9-10 LENGTH: SEMESTER CREDIT: 5.0

**ALGEBRA I** - The purpose of this course is to provide each student with basic principles through more complex algebraic concepts. Applications and connections to problem solving utilizing

technology and critical thinking are integrated throughout the course.

PREREQUISITE: NONE GRADE: 9 LENGTH: SEMESTER CREDIT: 5.0

MTH211 GEOMETRY COLLEGE PREP - Geometry is a course emphasizing Euclidean Geometry. The course includes a study of inductive and deductive reasoning, properties of segments, angles, perpendicular and parallel lines, triangle, quadrilaterals, circles, transformations, similarity, congruence, perimeter and area of two-dimensional figures and volume of solids. Real-world problem solving is emphasized in the study of each topic. Proofs are incorporated throughout

the course.

PREREQUISITE: MTH206 GRADE: 10 LENGTH: SEMESTER CREDIT: 5.0

MTH212 GEOMETRY HONORS - This course is designed for the highly motivated college bound student. The scope and sequence of this course ranges from basic geometric proofs and skills to

analysis/application of more advanced geometric theorems and concepts.

**PREREQUISITE:** Algebra I with ≥ 90% average (Grade 8 Placement Criteria)

GRADE: 9-10 LENGTH: SEMESTER CREDIT: 5.0

ALGEBRA II COLLEGE PREP - Algebra II is the third course in the regular college preparatory sequence. The course extends the process of Algebra introduced in Algebra I and uses the geometrical concepts from Geometry to produce a more magningful in depth approach to

geometrical concepts from Geometry to produce a more meaningful in-depth approach to new topics in Algebra. Algebra II incorporates graphing calculator activities for discovery,

problem solving, and modeling of algebraic concepts.

PREREQUISITE: MTH211 GRADE: 11 LENGTH: SEMESTER CREDIT: 5.0

**ALGEBRA II HONORS** - This course is designed for the highly motivated college bound student.

The scope and sequence of this course ranges from basic geometric proofs and skills to

The scope and sequence of this course ranges from basic geometric proofs and skills to

analysis/application of more advanced geometric theorems and concepts. **PREREQUISITE:** Geometry Honors or CP with  $\geq$  90% average

GRADE: 10-11 LENGTH: SEMESTER CREDIT: 5.0

#### MTH205

**COLLEGE ALGEBRA PREP** - Fundamental concepts will be reviewed quickly from Algebra 1. This will be followed by a rigorous schedule of topics that include the Algebra of polynomials and rational expressions, exponents, radicals and radical expressions, first and second degree equations and inequalities in both one and two variables including graphing, relations and functions, systems.

PREREQUISITE: MTH206 & 211 GRADE: 12 LENGTH: SEMESTER CREDIT: 5.0

#### MTH230

**TRIGONOMETRY/PRE-CALCULUS** - This course will develop the student's mathematical concepts, help improve logical thinking and promote success. This course is intended for students who wish to continue their education beyond high school in fields that require a solid background in mathematics. Emphasis is on the study of relations, functions, graphs, trigonometry, polar coordinates and limits. Students will analyze and graph mathematical functions. Focus will be set on the verification of trigonometric identities using all of the basic trigonometric functions. The use of graphing calculators will be integrated daily to encourage graphical as well as numerical and algebraic understanding.

PREREQUISITE: MTH222 GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

#### MTH231

**TRIGONOMETRY/PRE-CALCULUS HONORS** - Precalculus is intended to prepare students to apply mathematics in other fields of study and/or prepare them for the study of calculus. This course focuses on the mastery of critical skills and exposure to new skills necessary for success in subsequent math courses. Topics include functions, conic sections, trigonometric ratios and functions, inverse trigonometric functions; applications of trigonometry, including vectors and laws of sine and cosine; polar functions and notation; and linear algebra. Technology is fully integrated, rather than just added. The course encourages graphical, numerical and algebraic modeling of functions as well as problem solving and conceptual understanding.

**PREREQUISITE:** Algebra II Honors or CP with  $\geq$  90% average

**GRADE:** 11-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

#### **MTH232**

**STATISTICS & PROBABILITY** - As an alternative to Precalculus or Calculus for the student who is college bound, this course will prepare the student for a college statistics course which is required for many majors. The content will involve concepts of central tendency, variability, experimental design and probability.

PREREQUISITE: MTH222 GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

#### MTH249

**CALCULUS** - This course is an alternative to Advanced Placement Calculus for the student who is college bound. Calculus is designed to expose students to the fundamentals of calculus and prepare students to take a college level calculus course. This course reinforces key precalculus concepts, limits and continuity, derivatives, applications of derivatives and the definite integral.

**PREREQUISITE:** Trigonometry/Precalculus CP or Honors

**GRADE:** 11-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

#### MTH250

**ADVANCED PLACEMENT CALCULUS** - Advanced Placement Calculus is designed to prepare the exceptionally motivated student to take the Advanced Placement Calculus AB Exam for college credit. The Advanced Placement Calculus course consists of a full academic year of work in calculus and related topics comparable to courses in colleges and universities. A score of 3 or more on the ETS exam may enable the student to receive college credits from many institutions.

**PREREQUISITE:** Trig/Precalculus Honors with > 90% average

**GRADE:** 11-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

MTH260

**ADVANCED PLACEMENT STATISTICS** - The AP statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

**PREREQUISITE:** Algebra II Honors with ≥ 90% average

**GRADE:** 11-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

MTH261

**INTRODUCTION TO STATISTICS (OCC DUAL ENROLLMENT)** - An introductory college level course oriented towards all fields in which statistics finds applications. Topics include: summarizing data, probability, normal and binomial distributions, hypothesis testing, confidence intervals and correlation.

**PREREQUISITE:** Algebra II Honors with ≥ 90% average

**GRADE:** 11-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

MTH265

**CALCULUS I (OCC DUAL ENROLLMENT)** - This course is a study of limits and continuity; differentiation formulas for algebraic, trigonometric, inverse trigonometric, exponential, and logarithmic functions; higher order derivatives; mean value theorem; applications of the derivative including related rates, maximum-minimum; graphing; L'Hopital's Rule; antiderivatives; the definite integral; integration using substitution; applications of the integral to evaluation of area; and the alternate definition of the natural logarithmic function.

**PREREQUISITE:** Trig/Precalculus Honors with ≥ 90% average & OCC Placement Exam

GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

MTH270

**ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES** - AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical.

**PREREQUISITE:** Algebra 1 with  $\geq$  90% average

**GRADE:** 10-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

#### MTH275

**MATH 151: A SURVEY OF MATHEMATICS (OCC DUAL ENROLLMENT)** - This is a mathematical course for liberal arts students. This course is a study of some of the fundamental concepts in mathematics. Topics include: sets, probability, logic systems of numeration, groups, and mathematical systems. Applications of these topics in various fields of study are included in the course.

PREREQUISITE: MTH222 GRADE: 12 LENGTH: SEMESTER CREDIT: 5.0

# MUSIC

The Music Department offers students experiences in instrumental and/or vocal music. Instructions will be provided on an individual, small group, and large group basis. Opportunities to perform and create music are provided for students with or without training or experience in the form of the Marching Band, Concert Band, Spring Musical, and Choral Ensembles. Special ensembles, vocal and instrumental, are formed based upon student interest and ability. Advanced classes are available for students in Music Theory.

**MUS700** 

**INSTRUMENTAL MUSIC (BAND)** - The instrumental music class consists of the marching band, concert band, and small ensembles. In class students will explore aspects of pitch, melody, intonation and group playing. Students perform at winter and spring concerts as well as parades and football games. An exciting class for students who want to get involved, the band is one of the largest organizations in the school.

**PREREQUISITE:** NONE **GRADE:** 9-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

**MUS713** 

**MUSICAL THEATRE (IMPROV)** - Students will study the aspects of Drama, such as: Voice and Diction, Acting, The Structure of Drama, Varieties of Drama, History of Drama. The course is also a study of The Production of Drama: Producing a Play, Producing a Musical, Lighting and Sound, Costuming and Makeup. Students will compare Theater to Other Media and Theater to Other Art Forms. This course will also teach improvisation skills. Students will view popular musicals and compare screen versions to stage versions.

PREREQUISITE: NONE GRADE: 10-12 LENGTH: SEMESTER CREDIT: 5.0

MUS714

**ROCK BAND I** - This course is designed for individuals and small groups who desire to strengthen their skills on guitars, drums, keyboards, vocals, and bass guitars in a rock setting. Students will learn to read music notation, tablature, and chord symbols while also learning how to effectively mix music, repair instruments, and use sound systems. The class is open to beginners and more advanced players.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

**MUS715** 

**ROCK BAND II** - Rock Band II explores more advanced concepts of music performance including: pitch, rhythm, dynamics, digital recording, song arrangement, and composition. In addition to advanced performance concepts students explore elements of the music business including record deals, group management, and group public relations.

PREREQUISITE: MUS714 GRADE: 10-12 LENGTH: SEMESTER CREDIT: 5.0

# PHYSICAL EDUCATION/HEALTH

Health and Physical Education are separate disciplines each with a distinct body of knowledge and skills. Both are designed to complement each other as they reinforce wellness concepts. Physical Education promotes each student's optimum physical, mental, emotional and social development while providing student centered activities.

Requirement for Graduation: 4 years of Physical Education and four years of Health

**PHYSICAL EDUCATION I** - Freshman Physical Education focuses on individual and team sports with emphasis on skill development. Through skill, work and drills, students are readied for modified game situations that lead to strategy and techniques in regulation game play. Rules

and safety are emphasized. Fitness and wellness will be addressed daily.

PREREQUISITE: NONE GRADE: 9 LENGTH: SEMESTER CREDIT: 3.75

**HEALTH I** - Value clarification, decision-making skills and problem solving are emphasized. Drug awareness will concentrate on developing an understanding of the causes, effects and impacts of drug, alcohol and tobacco abuse. Other topics that may be explored are diet and nutrition,

eating disorders, and goal setting.

PREREQUISITE: NONE GRADE: 9 LENGTH: QUARTER CREDIT: 1.25

**PHYSICAL EDUCATION II** - Sophomore Physical Education also emphasizes individual and team sports. Skills will continue to be reviewed, while comprehension of game situations, rules, strategy, and sportsmanship will be developed. Fitness and wellness will be addressed daily. Further safety

precautions are stressed.

PREREQUISITE: PE001 GRADE: 10 LENGTH: SEMESTER CREDIT: 3.75

**HEALTH II (DRIVERS EDUCATION THEORY)** - Students will review New Jersey Motor Vehicle commission guidelines for safety and the laws governing drivers. Students will be able to take the

New Jersey State written test at the culmination of the course.

PREREQUISITE: HE001 GRADE: 10 LENGTH: QUARTER CREDIT: 1.25

**PHYSICAL EDUCATION III** - Junior Physical Education places an increased emphasis on lifetime physical activity. Students will develop the skills necessary to participate in individual and team activities that promote wellness. Through activity, students will develop an understanding of fitness principles, sportsmanship, and an appreciation for lifelong activity. Daily fitness will be

incorporated.

**PREREQUISITE:** PE002 **GRADE:** 11 **LENGTH:** SEMESTER **CREDIT:** 3.75

**HEALTH III (FAMILY LIFE)** - This course will provide the skills necessary to maintain sexual health throughout life by educating students on HIV and Sexually Transmitted Infection prevention,

contraception, and abstinence education.

PREREQUISITE: HE002 GRADE: 11 LENGTH: QUARTER CREDIT: 1.25

PE004 PHYSICAL EDUCATION IV - Senior Physical Education will continue to emphasize lifetime physical

activity. Students will refine skills in activities that they can participate in over a lifetime. Through

participation, students will demonstrate sportsmanship and knowledge of games. At the culmination of physical education students will recognize the benefits of lifelong fitness while gaining a further appreciation of lifelong activity. Daily fitness will be incorporated.

PREREQUISITE: PE003 GRADE: 12 LENGTH: SEMESTER CREDIT: 3.75

**HE004** 

**HEALTH IV (FIRST AID/CPR)** - This multidimensional course contains information on suicide prevention, muscular and skeletal systems and communicable and non-communicable diseases, as well as providing the American Red Cross Lay Responder First Aid Course.

PREREQUISITE: HE003 GRADE: 12 LENGTH: QUARTER CREDIT: 1.25

**PE540** 

**SPORTS TRAINING - ANATOMY & INJURY REHAB -** This course is designed for students interested in fields such as athletic training, physical therapy, medicine, nursing, fitness, strength and conditioning, physiology, kinesiology, nutrition and other sports medicine fields. Students will review concepts of basic First Aid, CPR and AED usage. Student will be able to identify the anatomy of various regions of the body. In addition, students will learn taping and wrapping techniques along with rehabilitation methods.

**PREREQUISITE:** Biology or Biology Honors

**GRADE:** 11-12 **LENGTH:** QUARTER **CREDIT:** 2.5

PE541

**SPORTS TRAINING - NUTRITION & EXERCISE PRESCRIPTION -** This course is designed for students interested in fields such as coaching, fitness, strength and conditioning, physical therapy, nutrition, and other sports medicine fields. Students will learn basic anatomy and anatomical terminology. Students will understand the concepts of performance enhancement and injury prevention through the use of strength training, conditioning, and nutrition. Students will understand the roles and responsibilities of various medical professionals that support athletes. They will identify facility management, budgeting, and legal issues associated with sports medicine.

**PREREQUISITE:** Biology or Biology Honors

GRADE: 11-12 LENGTH: QUARTER CREDIT: 2.5

# **SCIENCE**

The science curriculum has been updated to address the Next Generation Science Standards.

All courses are lab based. It is recommended that students complete Physics, Biology, and Chemistry during high school.

**Requirement for Graduation:** 3 years of laboratory science.

SCI571

**LAB PHYSICS COLLEGE PREP** - Physics is a foundational subject that lays the groundwork for all other sciences students will study. In this course students will explore the concepts of kinetic, potential and thermal energies, waves and electromagnetic radiation, forces and motion (including gravity), and static and current electricity. Students will apply their understanding of these concepts as they design experiments, analyze data, support their explanations, and identify patterns and relationships in their explorations.

PREREQUISITE: NONE GRADE: 9 LENGTH: SEMESTER CREDIT: 5.0

**SCI572** 

LAB PHYSICS HONORS - This course is designed for the highly motivated, academically advanced science student. Physics is a foundational subject that lays the groundwork for all other sciences students will study. In this course students will explore the concepts of kinetic, potential and thermal energies, waves and electromagnetic radiation, forces and motion (including gravity), and static and current electricity. Students will apply their understanding of these concepts as they design experiments, analyze data, support their explanations, and identify patterns and relationships in their explorations. An emphasis is placed on using mathematical modeling and analysis of data throughout the year.

PREREQUISITE: PLACEMENT CRITERIA GRADE: 9 LENGTH: SEMESTER CREDIT: 5.0

**SCI504** 

**LAB BIOLOGY COLLEGE PREP** - This lab-oriented course is designed for college bound students. This course provides each student with the opportunity to investigate the vital life processes. The curriculum includes the topics of cells, genetics, evolution, classification of living things, and ecology. This course will comprise a blend of reading, writing, and laboratory activities utilizing individual and group work skills, creativity, and problem solving, and scientific inquiry.

PREREQUISITE: SCI571 GRADE: 10 LENGTH: SEMESTER CREDIT: 5.0

**SCI505** 

**LAB BIOLOGY HONORS** - This lab-oriented course is designed for the highly motivated, academically advanced science student. The rigorous curriculum includes topics in cell biology, biochemistry, genetics, classification of living things, evolution, and ecology. This course is a blend of reading, writing, and laboratory activities utilizing individual and group work skills, creativity, problem solving, analytical skills and scientific inquiry.

**PREREQUISITE:** Physics Honors or CP with  $\geq$  90% average.

**GRADE:** 10 **LENGTH:** SEMESTER **CREDIT:** 5.0

**SCI514** 

**LAB CHEMISTRY COLLEGE PREP** - This lab-oriented course is designed for college bound students. This course is designed to provide the student with an understanding of the nature of matter using real world applications such as structure and property of matter, energy of chemical reactions, chemical bonding, matter and energy in living systems, nuclear chemistry, and the chemistry of sustainability. The ability to solve basic mathematical problems is required. This

course will comprise a blend of reading, writing, and laboratory activities utilizing individual and group work skills, creativity, and problem solving.

PREREQUISITE: SCI504 GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

**SCI515 LAB CHEMISTRY HONORS** - This lab-oriented course is designed for the highly motivated, academically advanced science student. This course is designed to provide the student with an understanding of the nature of matter using real world applications such as structure and property of matter, energy of chemical reactions, chemical bonding, matter and energy in living systems, nuclear chemistry, and the chemistry of sustainability. Emphasis will be placed upon technical reading/writing and mathematical approaches to problem solving.

**PREREQUISITE:** Lab Biology Honors or CP with  $\geq$  90% average. Concurrently taking Algebra II CP or Honors

**GRADE:** 11-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

**ADVANCED PLACEMENT BIOLOGY** - This advanced course is designed to build on the foundations of the first year of biology and provide interested students with the opportunity to work at the college level while still in high school. This course is a survey of all biology topics based on the College Board Syllabus and 12 required AP laboratories. Students will be able to take the AP Biology exam at the completion of the course to qualify for college credits

**PREREQUISITE:** Completion of Biology Honors and Chemistry Honors is recommended and ≥ 90% average in previous science courses. Concurrent enrollment in Chemistry Honors is acceptable

**GRADE:** 11-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

ADVANCED PLACEMENT PHYSICS - This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. AP Physics I is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.

**PREREQUISITE:** Geometry & Lab Physics with  $\geq$  90% average & Concurrently taking Algebra II

GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

ADVANCED PLACEMENT CHEMISTRY - The AP Chemistry course provides students with a foundation to support future advanced coursework in chemistry. Through inquiry based learning, students develop critical thinking and reasoning skills. Students cultivate their understanding of chemistry and science practices as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.

**PREREQUISITE:** Lab Chemistry Honors and Concurrently taking Algebra II CP or Honors

**GRADE:** 11-12 **LENGTH:** SEMESTER **CREDIT:** 5.0

SCI556

NEW JERSEY COASTAL ECOLOGY - This course is designed to provide an overview of the ecosystems within the New Jersey Outer Coastal Plain. This course deals with the ecological interactions between organisms and physical processes in the environment. The first half of this course explores the New Jersey Pinelands. The second half of this course explores the Coast of

New Jersey. Such topics include New Jersey geology, fire ecology, ocean circulation, tidal cycles and shoreline processes. In addition, various aspects of applied ecology, which may include land use, water use, population ecology, and human impacts on ecosystems, will be considered. This course will comprise a blend of reading, writing, and laboratory activities utilizing individual and group work skills, creativity, and problem solving.

PREREQUISITE: NONE GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

SCI561

**INTRODUCTION TO FORENSICS** - Learn the science behind CSI and the fascinating world of forensic investigations. There are presently about 40,000 scientists working in over 400 labs across the country who perform blood typing, DNA analysis, fingerprinting assessments, trace material and fiber analysis, impression and ballistic analysis, and drug and chemical identification. This science elective will provide the student with a scientific understanding of the basic building blocks of forensic investigation. Students will apply what they have learned to solve laboratory "crimes" following procedures used by actual crime scene investigators. This course will comprise a blend of reading, writing, and laboratory activities utilizing individual and group work skills, creativity, and problem solving.

PREREQUISITE: NONE GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

**SCI580** 

**HUMAN ANATOMY & PHYSIOLOGY (OCC DUAL ENROLLMENT)** - This course studies terminology associated with the study of human anatomy and physiology, homeostasis, feedback mechanisms; the chemical, cellular, and tissue level of organization as well as the integumentary, skeletal, muscular, and nervous systems. Dissection and laboratory instrumentation reinforce all lecture material.

**PREREQUISITE:** Biology CP or Honors with  $\geq$  90% average & concurrently taking Chemistry CP or Honors or > 90% average

GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

# **WORLD LANGUAGES**

High School students may begin their world language study in the 9<sup>th</sup> grade. These students will have the opportunity to pursue a four-year language sequence during their high school career.

**Requirements for Graduation:** Sate Requirement is 1 year.

WLS601/611

**SPANISH I/FRENCH I** - Emphasis is placed on the development and integration of four world language skills (listening, speaking, reading and writing). Structural analysis is reinforced via oral and written pattern practice. The development of reading and writing skills is based upon material first taught through audio-lingual methods. Illustrations and dialogues that facilitate conversation assist students. Culture is integrated via supplementary audio activities, videos and cultural readings.

PREREQUISITE: NONE GRADE: 9-12 LENGTH: SEMESTER CREDIT: 5.0

WLS602/612

**SPANISH II/FRENCH II** - This course is designed for the student who has satisfactorily completed the level one program. Students will work on building their vocabulary base, while moving toward developing greater fluency in the spoken language. Continued development of the four world areas continues to be the primary objective. Increased emphasis is placed on reading and more advanced grammatical topics. Writing remains a guided skill working toward original composition. Culture continues to be integrated via supplementary materials.

PREREQUISITE: WLS601/611 GRADE: 10-12 LENGTH: SEMESTER CREDIT: 5.0

WLS603

**SPANISH III** - This is a continuation of the second level Spanish class. Building on the vocabulary, grammar, culture and knowledge of the Spanish language, the students will utilize reading, writing, and speaking skills at a more advanced level. The past tense will continue to be reinforced while students learn additional complex language structure. The students will work on conversational and listening skills through the integration of native speakers and original project work. There will be an emphasis placed on the cultures of Spain, Ecuador and Costa Rica.

PREREQUISITE: WLS602 GRADE: 10-12 LENGTH: SEMESTER CREDIT: 5.0

**WLS604** 

**SPANISH IV HONORS** - This class is an advanced level course with a focus on conversation, history and literature. Students will focus on the history of Mexico, Puerto Rico, Cuba and Spain. Students will also discuss the influence of Latin America on the U.S. Students will read short stories written by various writers such as Gabriel Garcia Marquez and Sandra Cisneros. Spanish IV will continue to build on grammar and vocabulary with a goal to fluency.

PREREQUISITE: WLS603 GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

WLS613

**FRENCH III** - French III provides students with the opportunity to expand their knowledge of the French language and culture in a communication-based classroom setting. The past tense will continue to be reviewed as we move forward and begin to describe past events in the imperfect as well. Additional grammar focuses such as the use of direct and indirect objects will be reinforced. Vocabulary and cultural awareness are focal points of this course as we describe our interests and everyday activities with a focus on health, fitness, and leisure activities. French III is a constant strive towards communication and cultural awareness.

PREREQUISITE: WLS612 GRADE: 10-12 LENGTH: SEMESTER CREDIT: 5.0

**WLS614** 

**FRENCH IV HONORS -** French IV will provide students with the opportunity to expand vocabulary in a communication-based classroom. Students will focus on using their prior knowledge to explore new grammar concepts to communicate more effectively. Students will read their first short book "Le Ballon Rouge" and will also read a series of short stories, focusing on different areas of the Francophone world. French IV is a constant strive towards building language fluency and understanding.

PREREQUISITE: WLS613 GRADE: 11-12 LENGTH: SEMESTER CREDIT: 5.0

# **SENIOR OPTIONS**

SEM140

COLLEGE AND CAREER READINESS - Students will be monitored by a Structured Learning Experience Coordinator. The project may be academic, school, or community based, independent creative or career oriented (internship/job shadowing). The purpose of this project is to encourage career exploration and work with mentors, community, etc. Students will formally present their project using multimedia presentation to an evaluation committee. It is an opportunity for students to generate knowledge rather than choose a response and extend knowledge by doing something transformative with a problem or a complex situation. Students will learn time management skills and learn to work independently using an online format for class activities. A syllabus is given with deadlines. No late work will be accepted. Students prior knowledge, recent learning, and relevant skills to solve realistic problems and answer essential questions. Compare a significant piece of work, then self-evaluate and reflect upon the experience. It can be community service, which involves research as well as the student's active participation. It can be creative in nature-write a piece of music, develop a themed art portfolio, invent something-but it must include a research-based and self-evaluative component. It is an exploration citation of evidence, which supports a thesis and involves thoughtful understanding. Approval is needed to leave the building by Administration (attendance/discipline).

PREREQUISITE: NONE GRADE: 12 LENGTH: SEMESTER CREDIT: 5.0

BUTEC890

**SENIOR EXPERIENCE** - Paid work experience is provided by a business working in partnership with the School-Based Learning Program. The work experience is a continuation of vocational and academic skills learned in the classroom, allowing the student worker to build new and more advanced skills on those previously learned. Planning between school instructors and on-the-job supervisors must occur before students are assigned to the job, permitting an articulation between the classroom curriculum and the on-the-job training curriculum.

**PREREQUISITE:** Interview with Coordinator, Vice Principal in charge of Attendance, Guidance Counselor, and Coordinator approval. Must complete an application form, sign the rules and regulations agreement. Students shall provide their own transportation to and from the job. Students shall be required to register for the School-to-Work Program.

GRADE: 12 LENGTH: SEMESTER CREDIT: 10.0

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**EARLY COLLEGE AT OCEAN COUNTY COLLEGE -** Any senior who wishes to enroll as a part-time college student at OCC may do so if they have completed the following criteria:

- The student must have a weighted GPA of 85 or higher
- The student must be on track with NJDOE and local graduation requirements
- The student must be in good standing with attendance and discipline

<sup>\*</sup> Adjustments to the above criteria may be implemented at the discretion of the high school administration