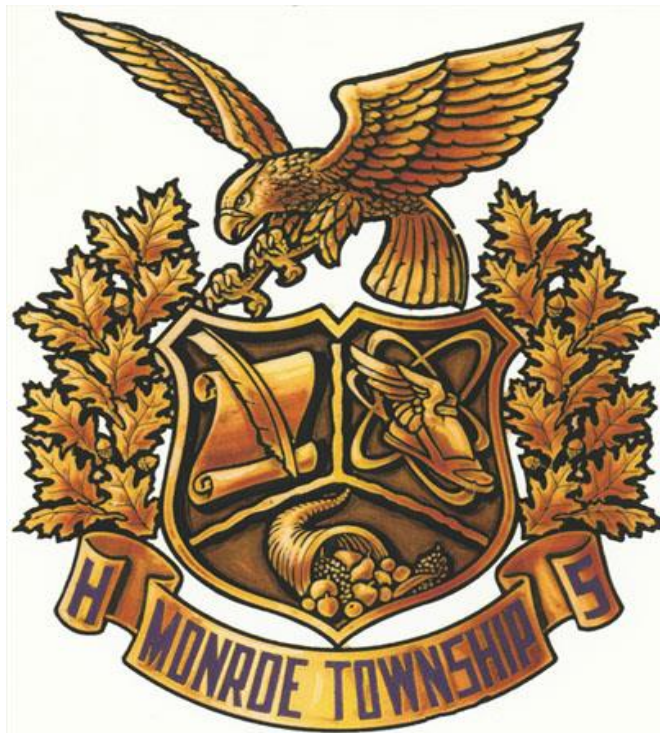


MONROE TOWNSHIP HIGH SCHOOL

“Excellence is Our Expectation”



***PROGRAM OF STUDIES
2021-2022***

A Message from the Principal

“The important thing is to not stop questioning. Curiosity has its own reason for existing.”
Albert Einstein

Dear Students and Parents:

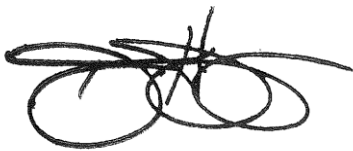
This program of studies represents a selection of world class educational opportunities delivered by the highest quality staff in a state of the art facility. It provides all students with a multitude of learning options that embraces their individuality and promotes their optimal success.

As principal, it is my great pleasure and honor to be a part of such a program that is only possible through the incredible support of the Monroe Township Board of Education, Monroe Township and Jamesburg Communities.

This program of studies is designed to assist students and their families in charting a course for their educational journey. The program of studies is a presentation of course offerings and requirements which will serve as a guide in selecting courses that will provide students with the foundation for their academic career. Secondary coursework should be planned to provide preparation for career goals and higher education requirements. Parental involvement in the course selection process is critical and strongly encouraged. Counselors and teachers are available to assist students and parents in their selections and to provide explanations.

It is our goal through the program of studies, in conjunction with the curriculum, to develop students who are equipped to compete and achieve success in any post high school endeavor and to be responsible, global citizens.

Best regards,

A handwritten signature in black ink, appearing to read 'Kevin Higgins', with a stylized flourish at the end.

Dr. Kevin Higgins
Principal

Foreword

The administration and staff of the Monroe Township High School is pleased to present to you the 2021-2022 Program of Studies. Our Program of Studies is designed to explain the course offerings at Monroe Township High School including descriptions of courses and graduation requirements. The courses offered reflect the understanding that our students must be prepared to be college and career ready in an ever-changing world. Within the Program of Studies you will find information for parents and students to use in planning a successful high school program.

Our continuing use of differentiated instruction and expectation of active student participation supports our belief system that all students can participate in a rigorous educational program and be successful. The Program of Studies offers a diverse selection of classes and electives to stimulate student interest and challenge their intellect. We believe our course selection offers a developmentally-appropriate learning sequence and meets the needs of all students. The Program of Studies exceeds the mandates of the New Jersey Student Learning Standards and includes all the courses necessary to obtain a state endorsed diploma.

We believe it is imperative for students and parents to work with their guidance counselor to create the most rigorous and challenging program available. The staff in the College and Career Counseling Center is a knowledgeable and dependable resource for all of the information students and parents/guardians need to make informed decisions. Additional information on all courses and programs is available from the College and Career Counseling Center.

The district has embraced Naviance, an online suite that helps us to use data to promote, measure, and improve college and career readiness skills for our students. Students and parents/guardians are urged to be proactive and ask the counselors about the long-term impact of short-term decisions as you plan your program at Monroe Township High School.

The Program of Studies is an evolving document, and we hope students and parents/guardians will take advantage of all the opportunities that Monroe Township High School has to offer.

Dr. Adam M. Layman

Assistant Superintendent of Schools

Monroe Township Board of Education

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Board President*

*Mr. Adi Nikitinsky
Vice President*

*Ms. Kathleen Belko
Ms. Karen Bierman
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Sreeja Mamillapalli
Student Board Members*

Central Administration

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Superintendent of Schools*

*Dr. Adam Layman
Assistant Superintendent*

*Mr. Michael Gorski, CPA
Business Administrator / Board Secretary*

*Ms. Marietta Ruella
Director of Pupil Personnel Services*

High School Administration

Dr. Kevin Higgins
Principal

Mr. Giuseppe Calella
Assistant Principal

Dr. James Cernansky
Assistant Principal

Mr. Michael Collins
Assistant Principal

Ms. Terri Weiss
Assistant Principal

District Supervisors

Dr. Michele Critelli
Supervisor of Guidance

Mr. Sean Dowling
Supervisor of Physical Education, Health, and Athletics

Ms. Danielle Drust
Supervisor of Social Studies and Sciences

Mr. Randy Flaum
Supervisor of Special Education

Ms. Susan Gasko
Supervisor of Mathematics and Instructional Technology

Ms. Laurie McConnell
Supervisor of Grants, Testing, and Special Projects

Mr. Zachary Morolda
Supervisor of Applied Arts and Career Technology

Dr. Kelly Roselle
Supervisor of Language Arts, Media, and World Languages

Department Coordinators

Mr. Matthew DeFilippis
Social Studies

Ms. Kathy Dillon
Physical Education and Health

Ms. Deborah DeBoer
Special Education

Mr. Edgar Esteves
Science

Mr. Martin Griffin
*Art, Industrial Arts, Business, Music,
Family and Consumer Science*

Ms. Meredith Kwitkoski
Mathematics

Ms. Renata MacKenzie
Language Arts

Mr. Willberg Rondon
World Languages

College and Career Counseling Department

Dr. Michele Critelli
District Supervisor of Guidance

Mr. Jared Carrier
Ms. Damaris Dominguez
Mr. Anthony Gambino
Ms. Cathy Ielpi
Ms. Lauren Mironov
Ms. Brooke Messinger
Mr. Joseph Zuccarello
Counselors

Ms. Doreen Mularney
Student Assistance Counselor

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MONROE TOWNSHIP SCHOOL DISTRICT

Mission Statement: The Monroe Township School District in collaboration with the members of the community shall ensure that all children receive an exemplary education by well trained committed staff in a safe and orderly environment.

Vision Statement: The Monroe Township Board of Education commits itself to all children by preparing them to reach their full potential and to function in a global society through a preeminent education.

Monroe Township School District Beliefs

- All decisions are made on the premise that children must come first
- All district decisions are made to ensure that practices and policies are developed to be inclusive, sensitive and meaningful to our diverse population
- We believe there is a sense of urgency about improving rigor and student achievement
- All members of our community are responsible for building capacity to reach excellence
- We are committed to a process for continuous improvement based on collecting, analyzing, and reflecting on data to guide our decisions
- We believe that collaboration maximizes the potential for improved outcomes
- We act with integrity, respect and honesty with recognition that the schools serves as the social core of the community
- We believe that resources must be committed to address the population expansion in the community
- We believe that there are no disposable students in our community and every child means every child

Monroe Township School District Goals

1. Raise achievement for all students paying particular attention to disparities between subgroups.
2. Systematically collect, analyze, and evaluate available data to inform all decisions.
3. Improve business efficiencies where possible to reduce overall operating costs.
4. Provide support programs for students across the continuum of academic achievement with an emphasis on those who are in the middle.
5. Provide early interventions for all students who are at risk of not reaching their full potential.

Adopted by the Board of Education
September 23, 2009

MONROE TOWNSHIP HIGH SCHOOL

Mission Statement

As an evolving, educational community, Monroe Township High School will design, develop and deliver an educational program, which fosters intellectual and personal growth by providing all students with an equal opportunity to acquire the knowledge, skills and strategies needed to become productive, responsible citizens contributing to society.

MTHS Beliefs Statements

- **The education of students is our primary responsibility and is cooperatively shared by students, educators, parents and community.**
- **Every student has the right to a quality education and equal access to appropriate learning opportunities.**
- **Learning is a dynamic, life-long process.**
- **Education must be relevant and responsive to an ever-changing world.**
- **Co-curricular activities are an integral part of the educational community.**
- **Students are worth the investment in educational excellence.**
- **All students and staff are entitled to a clean, comfortable, healthy and safe environment.**
- **Since students learn in different ways, a variety of strategies and materials are needed for learning to be maximized.**
- **Higher expectations result in better performance.**
- **Consistent effort, long-term commitment, and a positive attitude are essential for success.**
- **Creativity and flexibility are elements of the educational process.**
- **Professional autonomy provides incentive for teacher creativity.**
- **Education should provide positive role models for students.**
- **Responsive leadership is a necessary component of a quality education program.**
- **An educated citizenry is essential to the success of a democratic society.**

CURRICULUM SELECTION

This program of study lists by department the subjects which are offered to the students of Monroe Township High School. The subjects, which students select when planning their high school program, should be based on their individual abilities, interests and goals beyond high school. Additionally, since post high school requirements for employment, college or vocational and technical training are constantly changing, students should frequently re-evaluate themselves in terms of their immediate and long-range goals.

The Monroe Township Board of Education has provided the opportunity for students to engage in course work, which will meet their educational needs in accordance with their individuality. In addition to state and local graduation requirements, students are encouraged to select courses which will best suit their aspirations.

In the back of this booklet, there is a four-year-planning guide. It is strongly suggested that parents sit down with their students and tentatively map out a four-year plan for course selection. Please consult page 4 (college planning chart) of the Program of Studies when making plans. The College and Career Counseling Staff is always available to discuss such plans.

GRADUATION REQUIREMENTS

In order to graduate from Monroe Township High School, a student must obtain a minimum of 130 credits in grades 9-12. In addition, the successful completion of certain subjects is required as follows:

5 Credits	Health and Physical Education for Each School Year Enrolled
20 Credits	Language Arts
20 Credits	Mathematics *
5 Credits	Technology or Fourth Year of Science
15 Credits	Science - Biology, Chemistry, Physics
15 Credits	Social Studies
10 Credits	Performing, Practical or Visual Arts
10 Credits	World Languages
2.5 Credits	Economics
2.5 Credits	Personal Finance

*The fourth year of Mathematics may be fulfilled by taking a computer course in either the Business or Math Departments or an Accounting course. Students enrolled in Algebra I (A/B) will receive 5 credits toward the mathematics graduation requirement and 5 credits toward electives.

Additionally, mandated testing set forth by the State of New Jersey must be satisfied by all students of every class. **It should be noted, that only classes taken in grades 9-12 count toward the completion of these high school graduation requirements.**

Career education is infused in curriculum for all grade levels.

COLLEGE PLANNING

Post-high school goals should determine the courses a student opts to take in high school. Most colleges require a **minimum** of 16 Carnegie Units. A Carnegie Unit represents the completion of an academic course in high school. Courses taken in mathematics, language arts, science, world languages, and social sciences are the academic areas that are traditionally considered for Carnegie Units. A student will have the opportunity to take electives in the areas of Art, Business, Industrial Technology, Family and Consumer Sciences, and Performing Arts. These courses will provide each student with a well-rounded background for varied career and vocational interests.

Number of Years Recommended

Subject	Community College	Competitive College	Very Competitive College	Extremely Competitive College
Language Arts	4	4	4	4
Social Studies	3	3	3-5	3-5
Science (Lab Science)	2	2-3	3-4	3-5
World Language (same language)	0-2	2-4	3-4	3-5
College Prep Mathematics	3	3-4	4-5	4-5
Carnegie (Academic Units)	12-16	16-18	17-20	18-22

Colleges differ greatly in their requirements for admissions and programs change frequently to reflect the tenor of our times. It is also wise for students to make optimum preparation for eligibility to the largest numbers of colleges. To meet such standards students must: a) strive to work to their potential; b) develop good study skills; c) participate in community and school activities.

Factors in College Selection:

- | | |
|---------------------------|-------------------------|
| Type of college | Curricula |
| Size of college | Co-curricular offerings |
| Geographic location | Educational options |
| Size of community | Social life |
| Admissions requirements | Faculty |
| Degree of competitiveness | Religious affiliations |
| Financial considerations | |

Information about these factors may be obtained from college catalogs, college handbooks, admission officers, guidance counselors, visits and interviews, and computer searches. Students should contemplate these issues early in their high school career.

RANK in CLASS

R 5430 HIGH SCHOOL RANK in CLASS

Rank-in-class refers to the student's relative position in his/her class based on numerical average.

ACADEMIC INCENTIVE PROGRAM

The purpose of this program is to provide incentive to students who take a more rigorous program of studies than is required. The incentive will be in the form of adding "points" to the student's grades in specific courses for the purpose of "class rank". To receive these extra points a student must pass the course.

COURSES THAT RECEIVE EXTRA POINTS

All honor level courses in Language Arts, World Language, Mathematics, Science and History receive eight points. All Advanced Placement courses receive ten extra points.

ADDITIONAL NOTES for DETERMINING CLASS RANK

1. A report card notation of "W" (withdrew) shall not be counted.
2. A report card notation of "WF" (withdrew failing) or "WFA" (withdrew failing: attendance) shall be counted as a 45.
3. A report card notation of "WP" (withdrew passing) shall not be counted for the average.
4. Lab Service credits shall not count for rank in class.
5. No summer school courses shall be counted toward rank in class.
6. Courses taken for advancement purposes in an approved college program or in a state approved 120 hour program must have the prior written approval of the high school principal and the K-12 Supervisor. Students must also show evidence of a grade of 70 or better in the course and must receive a grade of 80 or better on the high school department final examination in order to advance to the next level. These courses for advancement purposes do not receive High School credit nor do they receive credit toward the calculation of rank in class or the GPA.
7. College level courses taken that receive prior approval of the MTHS Principal and K-12 Content Area Supervisor because a comparable course, or course required for graduation, is not offered within the high school curriculum shall be counted toward rank-in-class. The student must have exhausted all other similar options at MTHS. In this case, the student shall be granted appropriate credit for the college level course when computing his/her rank-in-class which shall include ten extra points. Students wishing to voluntarily take courses at the college level comparable to those offered at MTHS (courses not required for graduation) will not receive credit for the college level course when computing his/her rank-in-class and GPA. Students wishing to voluntarily take an online course will not receive credit when computing his/her rank-in-class and GPA. Students may not substitute an online course for a required course that is available at MTHS.
8. Transfer Students – Class Rank
In order for a student to be ranked, therefore become eligible for selection as valedictorian and salutatorian, he/she must be part of the student body for the entire 10th and 11th grades. Students who enter school and do not spend at least these two years at MTHS, prior to the ranking, will be given an estimated rank expressed in intervals of 5% (e.g., top 5%, top 10%, etc.).

NATIONAL HONOR SOCIETY

(Board of Education Policy #320)

In an effort to promote academic excellence among its students, the Board of Education shall recognize and support the existence of a local chapter of the National Honor Society. In doing so, the Board hereby establishes the following rules and regulations for students governing their entrance into and dismissal from the National Honor Society (NHS) organization.

Academic Eligibility Requirements

Senior students will be selected immediately after the first marking period while Junior students will be selected immediately after the first semester of the school year. Senior students must attain a weighted cumulative average of 90 by the end of the first marking period of their senior year. Junior students must attain a weighted cumulative average of 90 by the end of the first semester of their junior year. In addition to the grade requirements, candidates will be required to demonstrate their scholarship by submitting an original essay, which will reflect their understanding of the requirements and responsibilities of an Honor Society member.

Service, Leadership, Character Requirements

In addition to the above academic requirements, a student **must** have been actively involved in at least three school-sponsored activities and at least one community service activity during his/her high school career up to the time of selection. A student must be of good character and must present a positive attitude toward fellow classmates, the faculty, and the school. Although input is solicited from all faculty members, final selection will be made by a five-member Selection Committee appointed by the principal and chaired by the National Honor Society Advisor, who is an ex-officio member of the committee. Many fine students – eligible on paper – are not invited to join NHS for a variety of reasons. Upon appeal, the principal will insure that no procedural errors prevented an unsuccessful candidate from due consideration. The principal will **not** normally substitute his/her judgment for that of the selection committee.

Dismissal Procedure

Students are expected to maintain the standards used as the basis for their selection. Members who fail to maintain these standards in the areas of academics, service, leadership, or character shall be warned in writing by the chapter advisor (copy to parent) and given a reasonable amount of time to correct the deficiency. In the case of flagrant violation of school rules or civic laws, a member will not necessarily receive a prior warning. The selection committee shall determine when an individual has exceeded a reasonable number of warnings.

In all cases of impending dismissal, a member shall have a right to a hearing before the selection committee. A member who has been dismissed may appeal the decision of the selection committee.

First Appeal: Principal

Second Appeal: Superintendent of Schools

Third Appeal: Board of Education

Adopted: May 29, 1985 / Amended: September 20, 2000

HONOR ROLL

To be eligible for the Honor Roll, students must achieve an overall average of 85%. Only one course may have a grade in the 75% to 79% range. If a student receives a grade less than 75% or if more than one grade is in the 75% to 79% range, then the student is not eligible for the Honor Roll.

PRINCIPAL'S LIST

To be eligible for the Principal's List, a student must attain a grade of at least 90% in every course that they are taking.

COURSE REQUESTS

Please note that students have until June 1st to make changes to their course requests.

The selection of courses, by students, is one of the most important processes in student's high school career. Therefore, it is strongly recommended that students and parents thoroughly review required course offerings, elective course offerings including prerequisites before finalizing course selection.

STUDENT SCHEDULES

Students will receive their official schedules in late August. The schedule will reflect course requests and any course changes that were made prior to June 1st.

There are circumstances that may warrant a schedule change at the beginning of the school year. Upon receipt of their official schedule students may contact the College and Career Counseling Center with any questions or concerns.

COURSE/LEVEL CHANGE PROCEDURE

Students in AP and/or Honor level courses may appeal to withdraw to a lower level of the same course by the middle of marking period 1. Students must have demonstrated a willingness to succeed e.g., completed all homework assignments and class work, participated in all classroom activities, and attended class daily.

Please note that any change in a student's schedule is based upon course availability and may have an impact on the original schedule.

When a student drops a course, the student transcript will reflect W.

Withdrawal (W) – Withdrew to select another level of same course.

The grade from the previous course will carry over to the new course.

Transfers

Grades of students transferring from other schools will be given equal weight and averaged with current grades. Transfer students will be placed in equivalent courses if possible. If a transfer student has partially completed a course, which is not in the curriculum, the student will be given the option of completing the course at an accredited school and transferring full credit or the

student may drop the course thereby losing all credit. In any case, a notation of the course work and circumstances involved would be placed on the student's transcript.

SUBJECT SELECTIONS

Students in grades 9 – 11 must carry a full course load of classes. Students in grade 12 must carry a minimum of six classes in conjunction with Career Preparation and Research (formerly Senior Option).

GRADE 9

All pupils in Grade 9 must take Language Arts I, Mathematics, Physical Education & Health, Lab Biology, World History, and World Languages. World Studies may be taken in place of Honors Language Arts I and Honors World History. Elective subjects should be selected on the basis of what the student proposes to do after leaving high school.

GRADE 10

The required subjects for grade 10 include: Language Arts II, Mathematics, Physical Education & Health, Lab Chemistry, U.S. History I, and World Languages. American Studies I may be taken in place of Honors Language Arts II and Honors US I.

GRADE 11

The required subjects for Grade 11 include Language Arts III, Mathematics, Physical Education & Health, Physics, and U.S. History II. American Studies II may be taken in place of Honors Language Arts III and Honors US II.

GRADE 12

The required subjects for Grade 12 include Language Arts IV, Mathematics, Physical Education / Health.

SAMPLE FOUR YEAR PROGRAMS

9th Grade

Mathematics
Language Arts I or World Studies
Phys. Ed. & Health
Lab Biology
World History or World Studies
French I, Spanish I, Italian I, or Latin I
Personal Finance /Economics
Elective (1)

10th Grade

Mathematics
Language Arts II or American Studies I
Phys. Ed. & Health II
Lab Chemistry
French II, Spanish II, or Italian II
U.S. History I
Elective (2)

11th Grade

Mathematics
Language Arts III or American Studies II
Phys. Ed. & Health III
Physics / Lab Physics
History II
Elective (3)

12th Grade

Mathematics
Language Arts IV
Phys. Ed. & Health IV
Introduction to Ecology & Environmental Science U.S.
Introduction to Forensics/ Biotechnology Concepts/
Anatomy & Physiology / AP Biology / AP Physics
AP Chemistry / AP Environmental Science
Elective (4-5)

*Please note that most colleges require a **minimum** of 16 Carnegie Units (see college planning).

MONROE TOWNSHIP HIGH SCHOOL HONORS STEM ACADEMY

Science Technology Engineering & Mathematics

At Monroe Township High School, we recognize the importance of exploring career opportunities as part of a complete learning experience. The **Honors STEM Academy** is designed to meet the needs of students who have a clear and definitive interest in science, technology, engineering, and/or mathematics.

The academy program has been designed to prepare students for a competitive post-secondary education by placing students in various honors and Advanced Placement courses as part of an academic cohort. STEM Academy educators will support students in the program by providing cross-curricular educational experiences, using career content-related examples in instruction as appropriate, establishing connections to the career through community outreach, and providing a mentoring relationship for students.

Honors STEM Academy Curriculum

The Honors STEM Academy aims to provide students with a framework to maximize their strengths and talents while participating in a curriculum that is rich in both content and experience that matches their desired career interest. The academy prepares students that are interested in pursuing a career in STEM by offering them a challenging and rigorous STEM focused curriculum. During a student's freshman year, some students may express a high level of interest in a STEM career. The Honors STEM Academy is an application-based program that will provide students that meet specific criteria with a structured, small learning community experience. Students in the Honors STEM Academy will have a rigorous 3-year prescribed course of study. The three STEM disciplines include: Biomedical/ Pre-Medical, Engineering, and Information Technology.

Any freshman student that has an interest in a career in STEM may apply for the academy. Due to the rigor and expectations of the program, students interested in applying to the Honors STEM Academy must illustrate academic excellence, self-determination, and must exhibit a willingness to participate actively in the program.

Unique opportunities offered to **Honors STEM Academy** students include:

- Membership in a STEM small learning community with a cohort of like-minded students with common teachers and personal faculty mentors.
- Participation in after school clubs and activities that complement STEM studies.
- Support for volunteer work in the STEM fields.
- Assistance with the development of a digital portfolio over the course of sophomore, junior, and senior years of high school.
- Participation in a capstone project and/or internship in the Junior/Senior year of high school.

MONROE TOWNSHIP HIGH SCHOOL HONORS STEM ACADEMY

Science Technology Engineering & Mathematics

Mentoring Program

All students have the opportunity to apply to the Mentorship Program. The Mentorship Program is a commitment by a student to work directly with a teacher mentor as they explore a specific career interest and develop a digital portfolio. These students should already have a strong interest in one of the career clusters at the time of application. Students will also have access to other career-specific events such as professional workshops, research projects, and networking with experts in their chosen field.

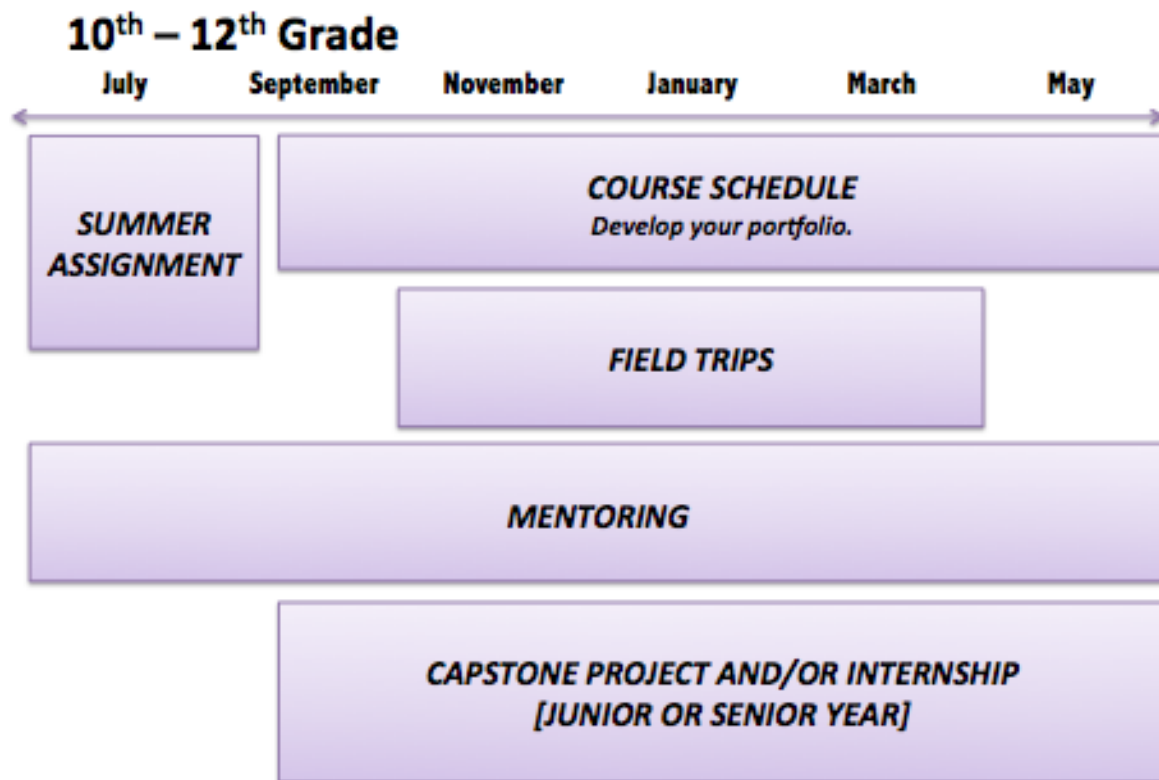
Commitment and Scheduling

Students accepted into the **Honors STEM Academy** program will follow the prescribed course schedule and limited elective/course choices as presented in the program of courses delineated on the next page. As scheduling cohort continuity depends on early and firm commitment there will NOT be any allowances for schedule changes, even over the summer.

The **Honors STEM Academy** area of study options include:

Biomedical/Pre-Med, Engineering and Information Technology

The general Honors STEM Academy experience:



STEM Academy Programs - SAMPLE SCHEDULES

Existing Academy Students	9th	10th	11th	12th
LA	H LA I	H LA II	AP LA III	H LA IV
Math	H Geometry	H Algebra II or AP Stats	H PreCalculus	AP Calculus AB*
Science	H Biology	Honors Chemistry	AP Physics I	AP Chemistry
SS	H World History	Honors U.S. History I	Honors U.S. History II	Fine, Prac. & Perf. Art
WL	World Language	World Language	World Language	AP Calculus AB*
PE/Health	PE/Health	PE/Health	PE/Health	PE/Health
7th Block - Biomedical	Fine, Prac. & Perf. Art	AP Biology*	H Anatomy & Physiology	AP Chemistry
7th Block - Comp Sci	Comp Sci Principles	AP Computer Science A	H Adv Web D or AP Comp Sci	H Appl Development
7th Block - Engineering	Intro Engineering Design	IED or Principles of Eng	POE or Civ Eng & Arch	Eng Design & Devel
8th Block - All Honors STEM	Econ/PF	AP Biology*	AP Seminar	AP Research / Res & Dev

4 Year Program Beginning Fall 2022 | Recommended Path for Students in the Class of 2025

Biomedical Track - Elite	9th	10th	11th	12th
LA	H LA I	H LA II	AP LA III	H LA IV
Math	H Alg II	H PreCalc	AP Calc A/B *	AP Calc B/C
Science	AP Biology *	AP Chem *	AP Physics I	Honors A&P
SS	H World History	AP U.S. I	AP U.S. II	-open-
WL	Spanish II or Option II	Spanish III or Option II	Spanish IV or Option II	-open-
PE/Health	PE/Health	PE/Health	PE/Health	PE/Health
7th Block	AP Biology *	AP Chem *	AP Calc A/B *	Fine, Prac, Perf Art
8th Block	Econ/PF	AP Seminar	AP Research	Fine, Prac, Perf Art

Biomedical Track - Honors	9th	10th	11th	12th
LA	H LA I	H LA II	AP LA III	H LA IV
Math	H Geometry	H Algebra II	H PreCalculus	AP Calculus AB *
Science	H Biology	H Chemistry	AP Physics I	AP Bio or AP Chem *
SS	H World History	AP U.S. History I	AP U.S. History II	AP Bio or AP Chem *
WL	Spanish II or Option II	Spanish III or Option II	Spanish IV or Option II	-open-
PE/Health	PE/Health	PE/Health	PE/Health	PE/Health
7th Block	Fine, Prac, Perf Art	Fine, Prac, Perf Art	H Anatomy & Physiology	AP Calculus A/B *
8th Block	Econ/PF	AP Seminar	AP Research	Fine, Prac, Perf Art

Computer Science Track - Honors	9th	10th	11th	12th
LA	H LA I	H LA II	AP LA III	H LA IV
Math	H Alg II	H PreCalculus	AP Calculus A/B *	AP Calculus B/C
Science	H Biology	H Chemistry	AP Physics I	-open-
SS	H World History	AP U.S. History I	AP U.S. History II	Fine, Prac, Perf Art
WL	Spanish II or Option II	Spanish III or Option II	Spanish IV or Option II	-open-
PE/Health	PE/Health	PE/Health	PE/Health	PE/Health
7th Block	AP Computer Science	AP Computer Science A	H Advanced Web Design	H Appl Development
8th Block	Econ/PF	AP Seminar	AP Research	Fine, Prac, Perf Art

Engineering (PLTW) - Honors	9th	10th	11th	12th
LA	H LA I	H LA II	AP LA III	H LA IV
Math	H Algebra II	H PreCalculus	AP Calculus A/B *	AP Calculus B/C
Science	H Biology	H Chemistry	AP Physics I	-open-
SS	H World History	AP U.S. History I	AP U.S. History II	-open-
WL	Spanish II or Option II	Spanish III or Option II	Spanish IV or Option II	-open-
PE/Health	PE/Health	PE/Health	PE/Health	PE/Health
7th Block	Intro Engineering Design	Principles of Engineering	Civil Eng & Architecture	Eng Design & Develop.
8th Block	Econ/PF	AP Seminar	AP Research	Fine, Prac, Perf Art

*double block – Beginning with the Class of 2023, students in the Hoors STEM Academy will enroll in AP Seminar in their junior year and AP Research (in lieu of Scientific research & Development -STEM) in their Senior year. Successful completion of both courses will provide students with the opportunity to receive an AP Capstone diploma from the College Board. These courses develop student’ skills in research, analysis, evidence-based arguments, collaboration, writing, and presentation.

Career Preparation and Research (Formerly Senior Options)

Terms and Definitions

College Credit – Students may select an approved course offering at Middlesex County Community College and receive college credit.

Mentorship – This program is offered primarily through the Family and Consumer Sciences Department and is a senior option for students who have successfully completed Working With Children I. High School students will be active participants during the regular school day at one of the district's elementary schools. Participation will include classroom instruction as determined by the regular classroom teacher. *Students may select a mentorship program on their own.*

Job Shadow – Students will have an opportunity through observation, interview and study to develop an understanding of specific occupations. Information can include such factors as qualifications for employment, functions performed, necessary skills and knowledge, equipment and materials used, required education, physical demands and working environment.

Community Service – Students will be able to receive high school credit by participating in a project that is designed to enhance and augment some aspect of the Monroe Township Community. Educational experiences will take place outside the school building during the regular school day or as determined by the representative of the community that is responsible for overseeing the project.

School Based Internship – The Monroe Township Board of Education will provide paid work experiences for high school seniors within the district.

Professional Internship (unpaid) – Internship is a program of study which includes supervised practical training.

Senior Seminar – This program will help students develop career awareness, employability skills, and the foundational knowledge necessary for success in the workplace or in higher education.

Work Study- Students are required to work 540 hours throughout the school year in a paid position along with a related classroom experience.

MATRIX SPECIFICATIONS FOR CAREER PREPARATON AND RESEARCH (formerly SENIOR OPTION)

	5 Credits	10 Credits	15 Credits	Required Related Course	150 Hours	300 Hours	540 Hours	Paid Position	Unpaid Position
Job Shadow		X *		X	X				X
Community Service	X				X				X
Senior Seminar		X *							X
Professional Internship		X *	X *	X	X	X		X	X
College Credit	Determined by College								X
Work Study			X *	X			X	X	
School Based Experience		X *		X	225 Hours			X	
Teaching Mentorship			X	X		X			X

* This includes five credits from the related course

SUPPLEMENTAL OFFERINGS

AVID (Advancement Via Individual Determination)

CREDITS: 5

Full Year

Prerequisite: Students must complete the AVID application. Students are selected by the AVID site team.

Grades: 9-12

AVID (Advancement Via Individual Determination) is offered as an elective course that prepares students for entrance into four-year colleges. There is an emphasis on analytical writing, preparation for college entrance and placement exams, study skills and test taking, note-taking and research. Students receive instruction in college entry skills, tutor led study groups, motivational activities and academic survival skills. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, and reading to support academic growth.

SPECIAL EDUCATION

The Special Education Department provides a full continuum of instructional options for students with disabilities who have been determined eligible for Special Education services by the child study team. Course options include resource instruction in Language Arts, Mathematics, Science, Social Studies, World Language, Reading, Criminal Justice, Business, Consumer Science and Transition. In addition, in-class resource instruction is provided in the content areas of Language Arts, Mathematics, Science, Social Studies and World Language.

Resource room programs offer small-group instruction to students with disabilities. In a replacement resource program, the Core Curriculum Content Standards and the instructional strategies may be modified based on the student's IEP. When a resource program is provided, it shall be specified in the student's IEP.

The In-Class Resource model is a collaborative teaching program. The special education teacher and content area teacher work together in a collaborative effort to provide support to special education students placed in mainstream classes. All students are expected to meet regular education curricular requirements with modifications to the instructional strategies and/or testing. When an in-class resource program is provided, it shall be specified in the student's IEP.

FALCON LIFE PROGRAM

The Falcon Life Program includes the following areas of study and exploration for the students: Vocational Exploration, Functional Academics in Math, Language Arts, Social Studies, and Science, Adaptive Physical Education, Life Skills, and Electives. The program is highly individualized and students are placed by IEP recommendation.

FUNCTIONAL LANGUAGE ARTS

CREDITS: 5

Functional Language Arts is to develop skills aligned with the Common Core State Standards for Language Arts while emphasizing literacy application and generalization of functional skills which can be applied to real-life situations. The course uses a balanced approach to academic and functional literacy instruction to support students in developing skills in the following areas: vocabulary, comprehension, grammar, main idea, literal and inferential recall knowledge, analysis, application, figurative language, writing, and research. Skills are taught using grade-appropriate literature and informational texts, with the goal of increased academic outcomes for students and preparing students to leave high school ready for postsecondary outcomes. The course is a multi-year curriculum and is aligned with the Common Core State Standards.

This course uses multiple supports to meet the needs of students' unique range of learning styles and abilities including multileveled learning objectives and supports for various communication modes.

FUNCTIONAL MATHEMATICS

CREDITS: 5

Functional Mathematics is to build upon mathematical skills grounded in Common Core State Standards for Mathematics while emphasizing a functional, real-life approach. Utilizing a literacy-based approach to mathematics, students who have an Individualized Education Plan (IEP) will engage in daily mathematics focusing on Geometry, Algebra, Data Analysis, and Measurement including functional math concepts like spending money, telling time, keeping a calendar, following maps, reading graphs, understanding paychecks, and budgeting. The goal of Functional Mathematics is to provide a program which will result in increased academic outcomes for students and prepare them to leave high school ready for post-secondary outcomes. The course is a multi-year curriculum and is aligned with the Common Core State Standards. This course uses a variety of supports to meet the needs of students' unique range of learning styles and abilities.

FUNCTIONAL SCIENCE

CREDITS: 5

Functional Science is a course with the purpose of introducing students to areas of Physical Science, Biology, Environmental Science, and Chemistry by utilizing hands-on instruction and real-world applications of science related skills. Students will have the opportunity to engage in activities such as working in a greenhouse, conducting experimental research, and tracking the weather. The course is a multi-year curriculum and is aligned with the Common Core State Standards.

FUNCTIONAL SOCIAL STUDIES and WORLD CULTURES

CREDITS: 5

This course is designed to develop students' functional and academic skills in the areas of World Geography, American History, American Government, Modern World History, and Contemporary World Issues. Functional Social Studies and World Cultures purpose provides students with real-world applications of social studies skills. The course is a multi-year curriculum and is aligned with the Common Core State Standards.

RESOURCE ROOM OFFERINGS LANGUAGE ARTS

LANGUAGE ARTS 9

CREDITS: 5

This course emphasizes skill based instruction in reading, writing, listening, viewing, and speaking. Students will have the opportunity to showcase mastery of these skills in a variety of formats. Various types of writing tasks will be reviewed and practiced with students through structured lessons that are related to various works and genres of literature. Completion of a research paper is a requirement of this course. This course fulfills the first year of the Language Arts requirement for graduation.

LANGUAGE ARTS 10

CREDITS: 5

At the tenth grade level, emphasis is on development of reading, writing, listening, and speaking skills in relation to American literature. Students are expected to read a variety of American authors, analyze the content, and discuss the selections in class. Students are required to produce a research project related to the content area. Specific critical thinking skills, ability to address open-ended questions, and crafting of different writing tasks are addressed in this course. This course fulfills the second year of the Language Arts requirement for graduation.

LANGUAGE ARTS 11

CREDITS: 5

This course is designed to expose students to British and World literature. Language skills are developed in conjunction with the literature, including critical analysis, essay writing, oral presentation, and group discussion. There is a required research project, related to areas of classroom study. This course fulfills the third year of the Language Arts requirement for graduation.

LANGUAGE ARTS 12

CREDITS: 5

Students in this course will be exposed to more recent works of fiction and nonfiction. Students will respond to the pieces through persuasive, reflective, and expressive writing. In addition, emphasis will be placed on the students' understanding of themselves, their avenues to self-discovery, and the influence of popular culture on literature, society, and their own lives. This course fulfills the fourth year of the Language Arts requirement for graduation.

MATHEMATICS

MATH / DYNAMICS of ALGEBRA I

CREDITS: 5

This course is designed for students who need to learn abstract algebraic concepts through concrete experiences employing an interactive workplace-centered approach. Individualized instruction, group work, activities, and projects are integral parts of this course. Connections to the workplace are accomplished through problem solving exercises. Topics explored in this course are: basic concepts of algebra; integers; equations; inequalities; absolute value; factoring; rational expressions; solving and graphing linear equations and systems of equations; real numbers and square roots; functions and relations, as well as heavy emphasis on a solid foundation in basic math. This course fulfills the first year of the Math requirement toward high school graduation.

MATH / DYNAMICS of GEOMETRY

CREDITS: 5

This course is designed for students to learn geometric concepts through concrete experiences and follows Math / Dynamics of Algebra I in the instructional sequence. Group and individual activities and projects are important components to this course. Connections to the workplace are accomplished through problem solving exercises. Technology and hands-on experiences are employed to motivate students to a successful conclusion of the sequence. Topics included are: points; lines; planes; segments; angles; parallel and perpendicular lines; congruent and similar triangles; polygons; proportions; right triangles; circles; perimeter; area; volume; as well as basic mathematics operations. This course fulfills the second year of the Math requirement toward high school graduation.

MATH / DYNAMICS of ALGEBRA II

CREDITS: 5

This course is designed for students to continue to learn abstract algebraic concepts and follows Math / Dynamics of Geometry in the instructional sequence. Individualized instruction, group work and projects are integral parts of this course. Connections to the workplace are accomplished through problem solving exercises. Some topics explored include: integers, equations, operations with polynomials, factoring, quadratic equations, rational expressions, irrational numbers, complex numbers, coordinate geometry, direct and inverse variation, conic sections, systems of equations, as well as basic math operations. This course fulfills the third year of the Math requirement toward high school graduation.

MATH for REAL LIFE

CREDITS: 5

This course emphasizes fundamental Math skills associated with the workplace and society. Day-to-day math living skills, banking, income tax preparation and investing for the future are explored.

MATH IV/COMPUTERS in BUSINESS

CREDITS: 5

Fundamentals and practice in using word processing, database, and spreadsheet software are the focus of this course. In today's modern business world, computer skills and tools are vital to students for business, education, and personal use. Materials in this course provide hands-on practice with the latest equipment and software. This course can fulfill the fourth year of the Math requirement toward graduation.

SCIENCE

SCIENCE: BIOLOGY

CREDITS: 5

This course will cover topics in Biology and Ecology using a hands-on, small group approach. A major focus of the course is the interrelated systems on our planet, both living and nonliving. Principles of observation, scientific method, and critical thinking are emphasized in this course, via demonstration, experimentation, class discussion, and group projects. This course fulfills the first year of the Science requirement toward high school graduation.

SCIENCE: CHEMISTRY

CREDITS: 5

In this course, the structure of matter and the changes it undergoes is the primary area of study. Practical examples, demonstrations, and labs will be employed to illustrate these concepts in a hands-on, small group setting. This course fulfills the second year of the Science requirement toward high school graduation.

SCIENCE: PHYSICS

CREDITS: 5

Physics exposes the students to interactions between matter and energy. In this hands-on, small group approach topics include electricity, magnetism, forces, mechanics, and motion. Experimentation, demonstration, and construction are methods employed to engage the students and lead them to an understanding of the concepts. This course fulfills the third year of the Science requirement toward graduation.

INTRODUCTION to FORENSICS

CREDITS: 5

Students will get the opportunity to explore the application of science to the criminal justice system. As part of the hands-on experience, students will be part of a team-based problem solving program where they will collect, preserve, and analyze evidence. Topics will include crime scenes and preserving evidence, types of evidence, toxicology, and arson.

SOCIAL STUDIES

WORLD HISTORY

CREDITS: 5

Students will gain a perspective of our present world through study of the past in this course that highlights human development from a historical perspective. The course highlights various significant civilizations and cultures and takes students into the present time allowing them to connect to contemporary global issues. Issues addressed throughout the course of the year include human rights, violence in society, global conflict, the arts, and world religions. This course fulfills the first year of the Social Studies requirement for high school graduation.

UNITED STATES HISTORY I

CREDITS: 5

The focus of this history course is the development of the US from its infancy through the nineteenth century. Emphasis is placed on student understanding of the development of our government, protection of our individual rights, reforms that have improved our way of life, and various other cultural and social issues. Projects, activities, and readings examine current events and global issues with their historical perspectives. This course fulfills the second year of the Social Studies requirement for high school graduation.

UNITED STATES HISTORY II

CREDITS: 5

This history course focuses on recent American history in the twentieth and twenty-first centuries. Besides the global conflicts during this time period, the course looks at technological advancements, social change, political change, economic change, and the struggle within our country for all citizens to achieve equality. Students will take current events and media events and analyze them in the context of our society and their own lives. This course fulfills the third year of the Social Studies requirement for high school graduation.

WORLD LANGUAGE

INTRO TO SPANISH

CREDITS: 5

Introduction to Spanish focuses on Spanish culture rather than language acquisition. Early language skill acquisition will be addressed, however the primary focus would involve learning about the history, geography, customs, and culture. This class would supply the students with a depth of background knowledge that will help support them in their future. It would bestow upon them a class in which they can learn about another culture without the obstacle of language.

SPANISH I

CREDITS: 5

This course offers the student an introduction to the Spanish language and culture. The focus is on basic vocabulary, sentence structure, grammar, and conversational speech. Students will be able to communicate on the most basic level, reproducing various life situations through dialogue in the small group setting. Students will be expected to listen, speak, read, and write in basic Spanish. There is a heavy cultural component to this course.

SPANISH II

CREDITS: 5

This course builds upon the framework established in the Spanish I class. It will provide the students with more in-depth study of the culture, as well as more practice in the language. Students will communicate on a basic level (both oral and written) and master additional vocabulary and grammar concepts.

READING

READING

CREDITS: 5

Grades 9 - 12

This course is designed for students who have been identified as needing more intensive work in the area of reading skills. Through small group instruction students will strengthen areas of weakness and increase their standardized test proficiency as well. Students' reading and writing levels will be assessed and monitored throughout the year and students will progress through the program as they master each level of performance.

CRIMINAL JUSTICE

CREDITS: 5

Grades 10 - 12

This full year course is designed to acquaint students with the American Legal system and the ways that this system affects their daily lives. This course will develop the students' basic knowledge of legal terms, the responsibilities and roles of the court officials, the requirements and use of contracts, the laws concerning liability and torts, individual property rights and responsibilities, and a survey of the criminal code. It will also include a segment on law, the student, and juvenile justice. Members of the state and local police agencies and attorneys may serve as guest lecturers. Possible field trips to view the criminal justice system in action are planned.

TRANSITION / SLE

Transitioning to Post-Secondary Options CREDITS: 5

Structured Learning Experiences CREDITS: 10

Full Year

Grades 11-12

Transitioning to Post-Secondary Options is designed to prepare students for work, an apprenticeship program, college, or another post-secondary education program they might pursue after high school. Students will receive instruction related to self-management skills, self-advocacy, decision-making skills, social skills, health and safety, employability skills, and money management skills.

Part two of this course can offer students in their senior year several opportunities to gain work experience directly related to their interests, strengths, and career goals. A Structured Learning

Experience (SLE) provides real world work experience that students can incorporate into their transition portfolio/resume for college or employment. Credit will be given based on successful completion of the SLE placement. Part two may also include individual guidance related to a student's transition plan.

INDEPENDENT LIVING

CREDITS: 5

Prerequisite: None

Grades 9-12

In this course, students learn to make satisfying, independent, and productive life choices. Students participate in activities related to self-awareness, decision making, career and financial planning, consumerism, housing, food preparation, wardrobe developments, clothing repairs, and a simple project. Relationships and communication will be covered as well as a brief overview of child development.

NUTRITIONAL ISSUES

CREDITS: 5

Prerequisite : None

Grades 9-12

This course is designed to promote a healthy lifestyle in students by encouraging and exploring the nutrient rich food. Schools play an important role in helping students establish healthy eating behaviors, by providing, nutritious and appealing foods and beverages, consistent and accurate messages about good nutrition, & ways to learn about and practice healthy eating. Nutritional issues was designed to empower students with the knowledge and skills to make healthy food and beverage choices.

SKILL BUILDING AND CAREER DEVELOPMENT

Prerequisite: Must be enrolled in MAPS Program

Grades: 9-12

Aligned with the 21st Century Life and Career Skills, this course aims to enhance core skills including organization, time and task management, goal setting, and communication. While striving toward the goal of becoming more independent learners, students will learn to access and process information more efficiently and develop higher level thinking skills. Students will work with the teacher to monitor their performance in all of their classes and to address areas of need as they may arise. The course will allow students to achieve their potential by providing opportunities for supervised completion of their assignments from their other classes, assistance with skill development, emotional and behavioral support, and motivational activities to inspire commitment. Students in this course can also identify and explore their future academic and career interests.

SOCIAL SKILLS

CREDITS: 2.5

Half Year

Prerequisite: None

Grades: 9-12

This course is designed for students who have been identified as needing improvement in identifying and developing strategies in the social skills area. This course will help students in developing and improving verbal and nonverbal communication, initiating and maintaining relationships, conflict resolution, practical applications to problem solving, recognizing and managing stress, self awareness, and self advocacy. Through modeling and small group instruction, the instruction will focus upon the students internalizing and utilizing these skills. This course will be offered to complement the Civics course.

CIVICS

CREDITS: 2.5

Half Year

Prerequisite: None

Grades: 9-12

This course will promote civic awareness and responsibility by providing students with instruction on the principles of democracy in the United States. Students will explore their participation on the local, state and federal levels as citizens of a constitutional democracy. Emphasis will be placed on critical thinking skills, problem-solving activities, and cooperative learning exercises. This course will be offered to complement the Social Skills course.

PERSONAL FINANCE /ECONOMICS

CREDITS: 5

Prerequisite: None

Grades: 9-12

This course is designed to educate students on the foundational concepts of economics as it relates to them as citizens of the United States and the World. The course will relate current events topics to traditional economic fundamentals. Areas of study will include microeconomic principles, economic systems, the role of businesses, the role of government, organized labor and the economy, the federal budget, global economics, and future economic challenges. Topics covered will enable students to become financially responsible members of society. This course will offer instruction on topics including but not limited to: financial planning, money management, consumer behavior and protection, banking and savings strategy, credit and debt management, the finances of independent living, risk management, insurance, and investing

UNIFIED: VISUAL ARTS

GRADES: 9-12

PREREQUISITE: Teacher Recommendation

This course is designed to focus on the application of the Fundamentals of Visual Art: drawing, painting, sculpture and digital design, as well as discover 21st century creative careers. Students will be presented with creative challenges in the form of unit-oriented projects in order to enhance their content knowledge, creativity, and artistic ability. The Visual Arts course is centered around the learning goals provided in the NJ 2020 SLS: Visual and Performing Arts - Visual Arts standards, NJ 2020 SLS: Career Readiness, Life Literacies, and Key Skills standards, NJ: 2017 SLS: Social and Emotional Learning standards, and the NJ: 2014 SLS: Technology standards.

MTHS COURSE OFFERINGS

BUSINESS EDUCATION (Practical Arts)

The Business Education program is designed to meet the needs of several types of students: The career oriented who plan to enter the world of work after completing high school; those who want to further refine their business skills at an accredited business school after completing high school; those who plan to pursue a career in a business related field.

HONORS BUSINESS ORGANIZATION AND MANAGEMENT

CREDITS: 2.5

Half Year

Prerequisite: None

Grade: 12

This is a college level semester course which offers three college credits by completing the course with a grade of C or better. This course will be offered in the first semester and serves as the prerequisite for the second semester College Marketing Course. Course content includes the planning, supervision, control and performance of activities involved in the production of goods and services. The problems of human relations and labor management and the functions of human resources, marketing, purchasing, production and finance are explored from the standpoint of effectively carrying on business that relates positively to the society of which it is a part.

COLLEGE MARKETING

CREDITS: 2.5

Half Year

Prerequisite:

Business Organization and Marketing

Grade: 12

This is a college level semester course which offers three college credits by completing the course with a grade of C or better. This course will be offered in the second semester upon completion of the prerequisite Business Organization and Management. Course content includes an overview of the field of marketing and the marketing concept. Students develop an understanding of the growing importance of the consumer, difference between industrial and consumer marketing, the impact of government and environment on marketing, and the basic marketing functions of product planning, marketing channels, physical distribution, promotion, pricing and marketing research.

ACCOUNTING I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

This course will provide the foundation skills necessary for preparing the accounting records of a sole proprietorship and partnership. The student will be introduced to the latest in automated accounting equipment (microcomputers) and accounting software. Completion of this course will enable the student to pursue future studies in higher education in the field of accounting, as well as provide for internships.

ACCOUNTING II

CREDITS: 5

Full Year

Prerequisite: Accounting I

Grades: 10-12

This course is the advanced version of Accounting I. Greater emphasis will be placed on the use of automated equipment (microcomputers). More sophisticated accounting techniques will be covered including financial reporting, corporate income tax, forms of partnership, and tax returns. Completion of this course will prepare students for future studies in higher education in accounting, finance, business management, or advanced placement in college accounting programs.

BUSINESS LAW

CREDITS: 5

Full Year

Prerequisite: None

Grades: 10-12

Do you know your rights? This course is designed to teach students about basic legal rights and the legal environment in which they live. Students will participate in class discussions, activities and debates, which will further enhance the fundamentals of business and personal law and how it relates in real life. Topics include: Careers in law, the origins of law, business ethics, criminal and civil law, the court system, contracts, agreements, warranties, consumer protection, liability and insurance, federal and state regulations, credit and bankruptcy, marriage and divorce. A class trip to the Superior Court of NJ, class speakers and videos/films will further enhance these topics.

PERSONAL FINANCE / ECONOMICS

CREDITS: 5

Prerequisite: None

Grades: 12

Personal Finance / Economics is a course that will prepare students for making wise financial decisions in their personal and professional lives. Topics covered will enable students to become financially responsible members of society. This course will offer instruction on topics including but not limited to: financial planning, money management, consumer behavior and protection, banking and savings strategy, credit and debt management, the finances of independent living, risk management, insurance, and investing. Concepts of economics as it relates to them as citizens of the United States and the World. The course will relate current events topics to traditional economic fundamentals. Areas of study will include microeconomic principles, economic systems, the role of businesses, the role of government, organized labor and the economy, the federal budget, global economics, and future economic challenges.

PERSONAL FINANCE / ECONOMICS- Digital Learning Experience:

CREDITS: 5

Prerequisite: None

Grades: 9-12

The online version of the Personal Finance and Economics course is designed to prepare students for making wise financial decisions in their personal and professional lives as well as educate students on the foundational concepts of economics as it relates to them as citizens of the United States and the World. The course will offer instruction on topics that mirror that of the traditional

course, however, this course will be delivered online. Students will work at their own pace to complete weekly course reading, writing and analytical assignments as well as participate in online discussions. Students must be able to demonstrate a disciplined approach to their studies as success is dependent on their ability to meet deadlines and contribute to the course in a timely manner. Students may choose one of the following formats:

Standard - The class will meet in the media center as a regularly scheduled class on their schedule. Students can choose to use the class meeting time to complete online course assignments or other work while keeping in mind that all online learning activities must be completed by the end of the course week.

AP MICROECONOMICS

CREDITS: 5

Full Year

Prerequisite: Personal Finance/Economics

Grades: 11-12

AP Microeconomics will provide students with a thorough understanding of the principles of economics that apply to the functions of individual decision makers, consumers, and producers, within the larger economic system. This course emphasizes the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. Students will benefit from obtaining an education in one of the most critical areas of business. The course will also highlight the affect political and business decisions have on an economy.

AP MACROECONOMICS

CREDITS: 5

Full Year

Prerequisite: Personal Finance/Economics

Grades: 11-12

AP Macroeconomics will provide students with a thorough understanding of the principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. The course will also look at macroeconomic issues such as the political impact on economic systems and the economic decision making process as well as through current events and global trends.

BUSINESS PRINCIPLES & PRACTICES

CREDITS: 5

Full Year

Prerequisite: None

Grades 9-12

An exploratory journey into the world of business which will address the wide range of career opportunities available in today's society. Finding the right job based on your interest and skills, understanding the importance of on-the-job experience with work experience education and internships, where and how to look for a job, developing habits and attitudes that will increase your employability, design a resume and all job search related letters (letter of interest, letter of resignation, follow up), preparing for an interview, building confidence, participating in a real-life mock

interview experience, income and salary negotiation, social media presence obligations and responsibilities, navigating the workplace environment, and balancing work and personal life while developing your career. This will allow students to make clear and confident educational and career choices in the future. Class lectures, discussions, activities and speakers will further develop an understanding of the various opportunities available to them.

MARKETING EDUCATION I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 10-12

This course is designed for students based on the knowledge that all careers incorporate marketing into their practices. The U.S. Department of Education has identified marketing as one of the sixteen career clusters. Careers in marketing include selling, advertising, research, retail merchandising, entrepreneurship, marketing information systems, hospitality, travel and tourism, and technical sales. All of these careers require the basic marketing skill learned in this course.

Students will also have the opportunity to utilize and incorporate their marketing skills and acquired knowledge while working on high interest and engaging projects.

CAREER PREPARATON AND RESEARCH: Project Based Learning Structure (formerly SENIOR OPTION)

CREDITS: Related class 5 / SLE: 2.5-15

Full Year

Grade: 12

Career Preparation and research is an elective course available to seniors. The program of study is designed for students to work independently. Students are encouraged to use their analytical and problem –solving skills to complete individual and group tasks effectively and efficiently. Research based assignments are supported through the delivery of multiple reports, often using an online forum. Students may choose from several Structured Learning Experiences (SLE Options) including: professional internship, school based internship (competitive process), work study, community service and teaching mentorship. In addition, students may elect to take a course offered through Middlesex County High School Scholars program to receive college credit during their senior year in high school. The Career Preparation and Research class focuses on career exploration, essential workplace skills and community responsibility. Career Preparation and Research class is required for all options excluding community service, and college credit. Teaching Mentorship is offered independently and has its own related class. See the Teaching Mentorship listing for more information on this option.

CAREER PREPARATION AND RESEARCH FOR JUNIORS: Project Based Learning Structure (FORMERLY SENIOR OPTION FOR JUNIORS)

CREDITS: 5

Full Year

Grade: 11

Career Preparation and Research is an elective course available to juniors in preparation for participation for a Structured Learning Experience (SLE) to be completed during senior year. The program of study is designed for students to work independently. Students are encouraged to use their analytical and problem-solving skills to complete individual and group tasks effectively and efficiently. Research based assignments are supported through the delivery of multiple reports, often using an online forum. Students successfully completing this class may choose from several Structured Learning Experiences (SLE's) during their senior year including: professional internship, school based internship (competitive process), work study, or community service. SLE's include: professional internship, school based internship (competitive process), work study, community service and teaching mentorship. In addition, students may elect to take a course offered through the Middlesex County High School Scholars program to receive college credit during their senior year in high school. The Career Preparation and Research for Juniors class focuses on college and career exploration, essential workplace skills and community responsibility. Career Preparation and research class is required for all options, excluding community service and college credit.

COMPUTERS IN THE BUSINESS WORLD

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

Learn to navigate technology in the world in which we live. Introduction to business skills, tools and materials are designed to provide hands-on practice with the latest computer equipment and technology. Skills which are necessary in today's business world for use in college, employment and even personal use. This course provides the fundamentals and enrichment of word processing, spreadsheet and presentation software using Microsoft Word, Excel, PowerPoint, PDF files and the internet using a PC platform. Explore Google Documents, Forms, Slides, and Classroom. Formatting letter design, document writing, drawing using shapes, spreadsheet formulas and calculations, creating a budget, tables, charting, graphing and document integration using a combination of the skills learned in the classroom, will be covered. Class lectures, presentations, discussions and speakers will allow for discussion topics related to careers in business and technology and use outside of the classroom.

OMNICHANNEL MARKETING (Formerly known as Sports and Entertainment Marketing)

CREDITS:5

Full Year

Prerequisite: None

Grades: 10-12

Omnichannel Marketing is a specialized course for students interested in marketing. In addition to covering the fundamentals of marketing, students will study specialized topics, including advertising, promotion, pricing, sponsorships, endorsements, and facilities management. This course also examines the advanced topic of social media marketing. Students will learn how to use today's most popular social media platforms to enhance marketing efforts. Search engine optimization, keyword research, audience awareness, lead generation, monetization, social media analytics, planning and auditing, and personal branding will be discussed. Finally, students will participate in two exciting and realistic online simulations that reinforce course concepts. One simulation requires that students

make business decisions to improve a professional sports and entertainment stadium's profitability. The second simulation lets students experience social media marketing in a safe, realistic, and dynamic environment by assuming a marketing executive's role in a hypothetical e-commerce company.

DECA

DECA is the co-curricula component of marketing and management. Marketing students, business management students and any student pursuing a career path in these areas are encouraged to join DECA to bring subject matter out of the classroom and into the workplace environment. All marketing textbooks contain DECA activities. By joining DECA, students have the opportunity to participate in academic competitions which simulate workplace responsibilities. Scholarship opportunities are provided by DECA's corporate partners, which consist of many of the Fortune 100 companies.

SENIOR SEMINAR (Career Preparation and Research))

CREDITS: 10

Full Year

Prerequisite: None

Grade: 12

Senior Seminar is part of the Career Preparation and Research. It is an elective course where students engage in a learning project of their choice. A written proposal must be submitted prior to acceptance into the program. Students will be required to present their project, answer questions which clarify, explain, or expand the project to a panel of staff members and students. **Senior Seminar will require independent research.** Completion of a research paper is an integral component of this course and will be a valuable asset to those students going onto post secondary education. Additionally, this program will help students develop career awareness and planning, employability skills, and foundational knowledge necessary for success in the workplace.

ENTREPRENEURSHIP

CREDITS: 5

Full Year

Prerequisite: Sports and Entertainment Marketing, Internet Marketing or Marketing I

Grade: 11-12

If you have ever thought about going into business for yourself then you have thought about becoming an entrepreneur. This course is designed for the student who has aspirations of owning his/her own business and who recognizes the organizational skills and managerial skills that are needed to operate that business. This learning experience will focus on the complete operation of the Falcon Zone School Store's physical location. Students will be actively involved in daily business decisions that will include topics such as marketing, human resources, financial management, buying and selling goods, credit, and a host of other functions that are essential for the successful operation of a business.

FAMILY AND CONSUMER SCIENCE (Practical Arts)

LIVING ON YOUR OWN

CREDITS: 5

Full Year

Prerequisite: None

Grades: 10-12

In this course, students learn to make satisfying, independent, and productive life choices. Students participate in activities related to self-awareness, decision-making, career and financial planning, consumerism, housing, food preparation, wardrobe development, clothing repairs, and a simple project. Relationships and communication will be covered as well as a brief overview of child development.

WORKING WITH CHILDREN I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

Working With Children is designed for those students who are interested in observing and being with young children. During the first nine weeks of school, students will discuss child developmental theories, as well as create lesson plan for games, story time, letter time and arts and crafts. The remaining time is devoted to running the Falcon's Nest Preschool for three and half and four-year-olds from the community. Students learn to interact with the young children and to promote responsible behavior. Working With Children is an important class for all students, especially those interested in a career concerned with children.

WORKING WITH CHILDREN II

CREDITS: 5

Full Year

Prerequisite: Working With Children I and Teacher Recommendation

Grades: 10-12

This class is designed to give the experienced Working With Children student additional experience in planning, implementing and evaluating a child development learning laboratory. During the first weeks, students will research and write cognitive lesson plans to be implemented in the Falcon's Nest Preschool. During the remaining time, students will follow an individual child attending the preschool and will record this child's physical, social, emotional, and cognitive growth. The students will learn how to communicate with both preschoolers and their parents to promote a positive relationship between home, school, and community.

WORKING WITH CHILDREN III

CREDITS: 5

Full Year

Grades: 11-12

Prerequisite: Working With Children II and Teacher Recommendation

Working With Children III is designed for the serious student who wants to challenge him/herself while learning more about preschool child development. Students will be involved in all phases of planning and implementing the Falcon's Nest Preschool while working with an individual child. This advanced level course is for those high school students planning to study child development, psychology or education in college.

TEACHING MENTORSHIP (Career Preparation and Research)

CREDITS: 15

Full Year

Prerequisite: Working With Children II, Teacher Interview and Recommendation

Grade: 12

Teaching Mentorship is part of the Career Preparation and Research. It is a senior class that is designed to give the students valuable experience working with younger children in a regular elementary classroom. Students will have the opportunity to work closely with school age children which will expose them to the field of education as a career choice. Students will work directly with the regular classroom teachers to develop lesson plans, projects, grades, etc. High school students will travel to the middle and elementary schools within the Monroe Township and Jamesburg School Districts to work with teachers. Students will learn about the opportunities available in the field of teaching, to cultivate the abilities essential in a good teacher, to learn of various trends, techniques, phases of education, and to foster the development of student leadership.

FASHION DESIGN I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

This course is designed to meet the needs of the student who is entering the field of fashion or who is interested in clothing construction as a hobby. The importance of creativity, image in clothing selection, consumer needs, and responsibilities are covered. Students work at their own pace and choose individual projects based on their abilities. No experience is needed for a student to perform well in this course.

FASHION DESIGN II

CREDITS: 5

Full Year

Prerequisite: Fashion Design I

Grades: 10-12

Fashion Design II will benefit those students with an interest in pursuing a career in the field of fashion. Monroe Township is within close proximity to the fashion capital of the world. The garment center has a mass number of career opportunities for students to explore. Students will learn detailed garment construction and sewing skills. Areas of study will include: Fashion Retailing, Buying, Language of Fashion, Textiles, and Fabric. In addition, students will study how the history of fashion influences today's designers. A variety of fashion related careers will be introduced to encompass art and design and retail merchandising. Students will have the opportunity to take field trips to the garment district as well as to various fashion institutes.

FASHION MERCHANDISING

CREDITS: 5

Full Year

Prerequisite: None

Grades: 11-12

Students will be introduced to the basic concepts of Marketing and how they are used in the fashion business. The students will work on several individual and group projects that will put their marketing ideas into practice. The class will study in depth the history of fashion throughout the decades from early 1900's to current day. Students will use their creative skills to sketch their own clothing designs, create advertisements, and present their ideas to a "sales team". All students will be required to

create a fashion forward window display to practice and develop visual merchandising skills. In addition, students will research the different career opportunities available to them within the field of Fashion Merchandising.

FOODS

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-10

The Foods class is designed to familiarize students with the basic techniques of food preparation. Students will prepare baked goods of all types, as well as learn to cook with vegetables, fruits, grains, eggs dairy products, and meats. Meal preparation, food selection, sanitation, and service are also emphasized. Nutrition as it applies to food preparation techniques and meal planning is covered.

INTERNATIONAL AND GOURMET COOKING

CREDITS: 5

Full Year

Prerequisite: Foods

Grades: 10-12

This course builds upon the basic concepts of baking, food preparation, and exposes students to international cuisine. First half of the class we will be learning, discussing, and practicing all the fundamental techniques that make us better bakers. We will touch on classic French pastry, bread baking, cake decorating, and more. The second half of class, we will be taking a trip around the world exploring traditional foods of Italy, India, Mexico, China and more. This course is recommended for students interested in learning to prepare more advanced recipes and broaden their taste buds.

CULINARY ARTS I

CREDITS: 5

Full Year

Prerequisite: Foods

Grades: 10-12

This course builds upon the basic concepts of food preparation and exposes students to the world of professional food service. The following topics will be covered: the Brigade system, cooking methods, seasonings and flavorings, soups and sandwiches, advanced baking and decorating, pasta and grains, culinary nutrition and regional cuisine. Students will use technology on a daily basis by collaborating with their peers, researching restaurant and foods styles as well as discovering new recipes and techniques. Culinary careers are emphasized throughout the school year via group projects and practical experience and practical experience catering various MTHS events.

CULINARY ARTS II

CREDITS: 5

Full Year

Prerequisite: Foods, Culinary Arts I

Grade: 11-12

This course builds upon the basic concepts of Culinary Arts I and exposes students to an advanced level of professional food service. The following topics will be covered: catering and Garde Manger, stocks and sauces, recipe creation, advanced baking and pastry, menu design, meat and fish cookery, international cuisine and cooking without a recipe. This course is recommended for students interested in pursuing a culinary career and/or learning more about the food service industry. Also, students will create and test recipes that they will prepare and serve to teachers at the Falcon's Bistro and various MTHS events.

INDUSTRIAL ARTS (Practical Arts)

INTRODUCTION ENGINEERING DESIGN (IED –PLTW)

CREDITS: 5

Full Year Course

Prerequisite: None

Grades: 9-10

The major focus of the course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students use the Design Process to help them design solutions to solve proposed problems and learn how to document their work and communicate solutions to peers and members of the professional community. The course will be the Introduction course in the Pre-Engineering strand of courses. These courses will be offered as high level electives for students who wish to pursue Engineering in college, gain valuable experience with the integration of CAD/CAM technology with Engineering and Industrial Design. When finished the students will be able to market their skills not only in applying to colleges of their choice, but also market those skills in a growing, very competitive, global economy. The curriculum will have both horizontal and vertical articulation, matching the students needs and growing skills throughout their coursework. These courses will also be designed as a compliment to the current and evolving Industrial Arts program, focusing on creative, "hands-on", problem solving and craftsmanship. This blend of contemporary and traditional coursework will be designed to reach all learners and encourage students to experience both.

DIGITAL ELECTRONICS (DE - PLTW)

Credits:5

Full Year Course

Prerequisite: Engineering Design

Grades: 10-12

Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards and technical documentation. This course is designed for 10th or 11th grade students.

PRINCIPLES OF ENGINEERING (POE-PLTW)

CREDITS: 5

Full Year Course

Prerequisite: It is recommended that students have a grade of 80 or better in Engineering Design and have taken or be enrolled in Algebra I before selecting this course. Teacher recommendation.

Grades: 10-12

Principles of Engineering (POE) is a high school-level survey course of engineering. The course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high tech career POE gives students the opportunity to develop skills and understanding of course concepts through activity-, project, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB learning challenges students to continually hone their interpersonal skills, creative abilities, and problem solving skills based upon engineering concepts. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

Students will employ engineering and scientific concepts in the solution of engineering design problems. Students will develop problem-solving skills and apply their knowledge of research and

design to create solutions to various challenges. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.

Principles of Engineering is the second of three foundation courses in the Project Lead The Way high school engineering program. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology.

ENGINEERING DESIGN AND DEVELOPMENT (EDD) –PLTW

CREDITS: 5

Full Year

Prerequisites: Engineering Design & Principles of Engineering

Grades: 11-12

In this capstone course, students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel.

CIVIL ENGINEERING AND ARCHITECTURE (CEA-PLTW)

Credits: 5

Full Year Course

Prerequisite: It is recommended that students have a grade of 80 or better in Engineering Design and have taken or be enrolled in Algebra I before selecting this course.

Grades: 10-12

Civil Engineering and Architecture is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry.

The major focus of the CEA course is to expose students to the design and construction of residential and commercial building projects, design teams and teamwork, communication methods, engineering standards, and technical documentation.

MATERIALS AND METHODS FOR TECHNOLOGY I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-10

This course is designed to introduce the student to both traditional and modern materials used in today's technologies. The students will discover through hands on problem solving activities how materials are processed and used in today's technologies. They will also look at how materials are changed from raw materials into finished products. Materials covered will include wood, metals, plastics, composites, semiconductors, and newly emerging materials. Students will learn how these materials are processed and combined to meet the needs of modern day living. A section of the course will be on the careers in these areas and how advancements in the area of materials and processes have shaped our world.

MATERIALS AND METHODS FOR TECHNOLOGY II

CREDITS: 5

Full Year

Prerequisite: Materials and Methods for Technology I

Grades: 10-12

Materials and Methods for Technology II class is designed for students who completed Materials and Methods for Technology I. This course will build on the objectives, goals, and project based assignments that students completed in the introductory course. There will be greater focus on documenting the design continuum in addition to covering all of the material families. Kinesthetic learning experiences will allow students to analyze the outcome of manipulating various materials to solve different problems. The students will also gain greater technological literacy as a result of practical problem solving in the classroom.

CABINETMAKING

CREDITS: 5

Full Year

Prerequisite: Materials and Methods for Technology I

Grades: 10-12

This course is suggested for the advanced woodworking student. Students are allowed extensive lab time to complete a required woodworking project of the student's own design. Students will be encouraged to use different combinations of materials in the production of their projects. Students will explore advanced machine and power tool techniques which will aid in the construction of their projects. Students will study the design process to give their projects a sense of style and function.

CONSTRUCTION TECHNOLOGY

CREDITS: 5

Full Year

Prerequisite: Materials and Methods for Technology I

Grades: 10-12

Construction Technology provides students with experiences in the construction industry. A systems approach to construction will be studied. Some systems covered will include foundation, floor, wall, electrical, plumbing, and HVAC. Students will be involved with construction techniques and the estimating/planning process. Students will also gain valuable experience in exterior and interior design. Advanced areas of study will include agriculture, transportation, space, and underwater construction.

DRAFTING I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

In this introductory course, students will become skilled in communication through logical, precise drawings. Areas of study will include applications of line drawing, line composition, lettering, geometric shapes, designs and constructions, size description and orthographic projection. In addition, the student will become skilled in the proper use of a variety of tools, instruments and media commonly used by the draftsman. Drafting is the universal language of the engineering industry. An introduction to CAD will be given.

DRAFTING II

CREDITS: 5

Full Year

Prerequisite: Drafting I (Drafting)

Grades: 10-12

In this advanced course, students will develop skills in communicating through logical and precise drawings. Areas of study will include isometric drawing, perspective drawing, inking, sketching, section drawing, fasteners and completed production drawings. The student will also become skilled in proper use of a variety of tools, instruments and media commonly used by the draftsman. In addition, CAD will be explored. It is suggested that Drafting I be successfully completed prior to selecting this course.

DRAFTING III /ARCHITECTURE MODEL BUILDING

CREDITS: 5

Full Year

Prerequisite: I.ED. (Intro to Engineering Drafting), Drafting II (Drafting and Design)

Grades: 10-12

This advanced course is geared to understanding the nature of the occupation comprising the field of architecture, as well as developing skills in architectural design and drafting. Areas of study include basic principles of architectural design, building site evaluation and planning, residential plan development, construction and creating your own home design via an actual basswood architectural model, and design presentation techniques. Computer assisted drawing (AutoCAD) & (Auto-Cad Revit) will be an integral part of this course.

COMPUTER AIDED DRAFTING (CAD)

CREDITS: 5

Full Year

Prerequisite: Drafting II (Drafting and Design)

Grades: 11-12

This is an advanced course for the student who will be developing skills in communicating through precise drawing. In order to be a part of the CAD program, the student must already be familiar with the basic drafting skills and procedures. Many computer commands will be learned in order to produce orthographic, isometric and perspective drawings. At the successful completion of CAD, students will be able to apply it directly to specific design and drafting needs. It is recommended that any student who wishes to pursue a career in drafting, architecture, engineering, or technology complete this course. It is suggested that Drafting I, and Drafting II (Drafting and Design) be successfully completed prior to selecting this course.

DIGITAL PHOTOGRAPHY I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 10-12

Students will learn in depth features of a digital camera to take photographs beyond the camera phone snapshot. There is a heavy emphasis on computer based photo editing using the software Adobe Photoshop. The student will learn to use a computer throughout the school year to enhance and manipulate their digital images. In addition, they will learn computer photo editing and retouching capabilities. This course is designed for the student who likes to take digital photos using a digital camera and is interested in the knowledge and capability of editing photographs in the computer software, Adobe Photoshop.

DIGITAL PHOTOGRAPHY II

CREDITS: 5

Full Year

Prerequisite: Digital Photography I and Teacher Recommendation

Grades: 11-12

This course would be a continuation of the Digital Photography course with more of an artistic edge to the photo editing process. The student will expand their knowledge of the basic digital photography course, allowing for the opportunity to learn the concepts and creations of digital art, how to make 3D objects, animation and the beginning works of web design using the PhotoShop computer software. The student will be required to have had Digital Photography I as a prerequisite. Having this previous experience, more creative demands will be placed on the student. Challenging, college level, assignments will be preparing the student for the next level.

VIDEO PRODUCTION I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

This is an entry-level course designed to give students a fundamental knowledge and practical experience in the techniques and concepts of video and television production. Students will gain experience in using production equipment both in the studio and in the field. They will produce a wide variety of program types including public service announcements, news programs, and narrative video projects. Coursework and projects focus on the entire production process from concept development to editing. In addition to hands on learning, this is an academically rigorous course that focuses on the technological and aesthetic aspects of video production. Active participation is necessary to succeed in this course.

VIDEO PRODUCTION II

CREDITS: 5

Full Year

Prerequisite: Video Production I and, "Writing for Television" recommended

Grades: 10-12

This is an advanced course in the techniques of television production and is available to any student who has successfully completed the Video Production I course and who has obtained approval by the instructors. This course will focus on the television studio, high school and district video productions, sports, special event tapings, and an introduction to short film production. Students will also have an opportunity to work on programs aired on the Monroe Township local cable channel. This course is designed for the serious student. Students will be required to take an active role in several productions, which will include appearing in front of a camera. Students enrolled in this course will be required to record various school related activities that may occur during after school or evening hours.

VIDEO PRODUCTION III

CREDITS: 5

Full year

Prerequisite: Video Production I and II

Grades: 11-12

Video Production III completes the video production course series. Students in this advanced program will focus on refining and advancing their production techniques and skills, including advanced cinematography and post-production. Projects include dramatic or comedic scenes, short films, documentaries, and commercials/PSAs, some of which will be submitted to state or national contests. Students who elect to take this course must be independent workers, as many of the projects require producing content beyond the regular school day.

WRITING FOR ELECTRONIC MEDIA

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

In this course students will learn techniques in script writing for TV, radio, and other related electronic mass media. They will become proficient in adhering to specific formatting, language usage, and content requirements, while at the same time explore the creative aspects of writing for electronic mass media. Students in this course will have the opportunity to cooperate with students in other courses and create a variety of television or radio programs, further developing their writing skills.

Monroe Township Schools
Language Arts Sequence 2021 – 2022

Grades K-4	Grades 5-6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Language Arts Grades K-4	Language Arts Grades 5-6	Language Arts Grade 7	Language Arts Grade 8	Language Arts I	Language Arts II	Language Arts III	Language Arts IV
				Honors Language Arts I	Honors Language Arts II	Honors Language Arts III	Honors Language Arts IV
						AP Language Arts III (Language and Composition)	AP Language Arts IV (Literature and Composition)
				Honors World Studies	Honors American Studies I	Honors American Studies II	

Language Arts Electives:
 Introduction to Public Speaking /Modes of Writing
 The Total Experience: Creating the Yearbook
 Drama and Acting I
 Drama and Acting II
 Journalism I
 Journalism II
 SAT Verbal
 Creative and Argumentative Discourse

Other:
 Fundamentals of Literacy

The above represents a typical Language Arts sequence. The actual sequence may vary based on student performance and teacher recommendation.

LANGUAGE ARTS

LANGUAGE ARTS I: COMPOSITION AND INTRODUCTION TO LITERARY GENRES

CREDITS: 5

Full Year

Prerequisite: None

Grade: 9

This course emphasizes sequential, skill-based instruction in reading, writing, listening, speaking, and viewing. Through oral presentations, interviews, debates, research assignments, special projects, and discussions, students will have an opportunity to apply the skills learned in a variety of formats. Writing styles such as descriptive, narrative, expository, and persuasive are taught to offer the students an understanding that people write for a variety of purposes and audiences. Throughout the course a strong focus will be placed on composition to prepare students to be effective communicators. As students are exposed to various writing styles and skills, they will be introduced to a diverse range of literary genres including but not limited to: drama, short story, poetry, and novels. Completion of a research paper is an integral component of this course. Finally, the course addresses the Common Core Standards within its framework.

HONORS LANGUAGE ARTS I: COMPOSITION AND INTRODUCTION TO LITERARY GENRE

CREDITS: 5

Full Year

(This course receives honors weighting for the calculation of the GPA).

Prerequisite: Performance in 8th grade language arts with a minimum average of 85

Grade: 9

This course, which is designed for the accelerated learner, stresses extensive reading and critical analysis of literature. Writing skills are enhanced through paragraph development, essays and creative pieces including short stories and poems. Research skills are reinforced and a documented research project is produced. Speaking skills are developed through oral reports and an introduction to techniques of debate. A Shakespearean play and a Dickens novel highlight the literature component of this course. Language Arts I (Honors) fulfills the first year of the four-year State requirement for graduation in English Language Arts and incorporates the Common Core Standards within its framework. Completion of a research paper is an integral component of this course.

HONORS WORLD STUDIES

CREDITS: 5

(This course receives honors weighting for calculation of the GPA).

Full Year

Prerequisite: Performance in 8th grade language arts and social studies with a minimum average of 85.

Grade: 9

World Studies is the first course in a series (World Studies, American Studies I & II), which presents students with a unique opportunity to explore interdisciplinary study through the integration of historical topics/concepts with literature and art prevalent of and/or set in the time period. Through this integration, students will actively participate in and collaborate on thematic projects, providing them with a holistic view of a variety of cultural, artistic, and literary movements. The course, then, is a multi-faceted approach to learning that enables students to piece together historical movements, literature, and art in a hands-on, engaging, manner. These studies will also encompass a strong emphasis on verbal SAT and writing skills as they relate to the various historical, economic, political, and social movements of the day. Completion of a research paper is an integral component of this course. **Students enrolled in this course must select the complementary Social Studies course component. It is strongly recommended that students continue in the series.**

LANGUAGE ARTS II – American Literature

CREDITS: 5

Full Year

Prerequisite: None

Grade: 10

In the tenth grade students develop reading, writing, listening and speaking skills while beginning the study of American literature. They analyze and discuss the selections in each genre, produce a research paper/project, and hone their vocabulary and usage skills. Language Arts II fulfills the second year of the four-year State requirement for graduation in English Language Arts and incorporates the NJSLs within its framework. Completion of a research paper is an integral component of this course.

HONORS LANGUAGE ARTS II – American Literature

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Full Year

Prerequisite: Language Arts I - grade of 90 or Language Arts I H - grade of 85.

Grade: 10

This course, which is designed for the accelerated learner, stresses extensive reading and critical analysis of literature. The skills, which are developed, include grammar and vocabulary, group discussion, composition, and creative writing. Students begin the study of American literature and analyze novels, short stories, plays, and nonfiction. This course fulfills the second year of the four-year State requirement for graduation in English Language Arts and incorporates the NJSLs within its framework. Completion of a research paper is an integral component of this course.

HONORS AMERICAN STUDIES I – Language Arts

CREDITS: 5

(This course receives honors weighting for calculation of the GPA).

Full Year

Prerequisite: Performance in 9th grade World Studies Language Arts and World Studies Social Studies with a minimum average of 85

Grade: 10

American Studies I is the second course in a series (World Studies, American Studies I & II), which presents students with an opportunity to explore an innovative, interdisciplinary study, linking topics from eighteenth and nineteenth century U.S. History with literature indicative of the time period. The course is taught thematically, enabling students to make meaningful connections. Students are exposed to the same objectives taught in the traditional classes, yet course content is presented through a team-teaching, integrated approach. Throughout the course students gain insight as to why writers of various historical time periods wrote about specific subject matter and utilized particular styles as they study forces and movements in history. Students taking this course will satisfy their Language Arts II graduation requirement. Projects, readings, and activities are demanding, yet the course is designed for students who thrive in a creative, academic environment. Completion of a research paper is an integral component of this course. **Students enrolled in this course must select the complementary Social Studies course component. It is strongly recommended that students continue in the series.**

LANGUAGE ARTS III – British and World Literature

CREDITS: 5

Full Year

Prerequisite: None

Grade: 11

This course is designed to allow students to investigate and analyze the historical background of British and World literature. Language skills are developed separately and in conjunction with the study of literature. Various short stories, poems, novels, and other literary genre are read, evaluated, and analyzed in written and oral form. Specific skills, such as critical analysis, essays, group discussion, creative writing, grammar and vocabulary are developed. This course fulfills the third year of the four-year State requirement for graduation in Language Arts and incorporates the NJSLs within its framework. Completion of a research paper is an integral component of this course.

HONORS LANGUAGE ARTS III–British and World Literature

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Full Year

Prerequisite: Language Arts II - grade of 90 or Language Arts II-H - grade of 85.

Grade: 11

This course is designed to allow the accelerated student to investigate and analyze the historical background of British and World literature. In-depth analysis in oral and written form is emphasized. Specific skills are developed in research writing, technical analysis, essays, prepared oral presentations, group discussion, grammar and vocabulary. This course fulfills the third year of the four-year State requirement for graduation in English Language Arts and incorporates the NJSLs within its framework. Completion of a research paper is an integral component of this course.

HONORS AMERICAN STUDIES II – Language Arts

CREDITS: 5

(This course receives honors weighting for calculation of the GPA.)

Full Year

Prerequisite: Performance in 10th grade American Studies I Language Arts and American Studies I Social Studies with a minimum average of 85.

Grade: 11

American Studies II is the third course in series (World Studies, American Studies I & II), which presents students with an opportunity to explore an innovative, interdisciplinary study, linking historical developments in the U.S. during the twentieth century with literature written during the time period. As with American Studies I, this course is taught thematically, enabling students to make meaningful connections. Students are exposed to the same objectives taught in the traditional classes, yet course content is presented through an integrated approach. Students taking this course will satisfy their Language Arts III graduation requirement. Projects, readings, and activities are demanding, yet the course is designed for students who thrive in a creative, academic environment. Completion of a research paper is an integral component of this course. **Students enrolled in this course must select the complementary Social Studies course component. It is strongly recommended that students continue in the series.**

ADVANCED PLACEMENT LANGUAGE ARTS III

(Language and Composition)

CREDITS: 5

Full Year

(This course receives advanced placement weighting for the calculation of the GPA).

Prerequisite: Language Arts II H - grade of 90.

Grade: 11

This rigorous academic course engages students in becoming skilled readers of prose written in a variety of periods, disciplines and rhetorical contexts and becoming skilled writers who compose for a variety of purposes. Students read British and World literature to gain an understanding of the richness and complexity needed to communicate effectively with mature readers. Specific skills are also developed in researching writing, technical analysis and oral presentations. This course fulfills the third year of the four-year State requirement for graduation in English Language Arts and incorporates the State Language Arts Core Curriculum Content Standards within its framework. Completion of a research paper is an integral component of this course.

LANGUAGE ARTS IV

CREDITS: 5

Full Year

Grade: 12

This course is designed to introduce students to more recent works in fiction and non-fiction.

Students will have the opportunity to respond to these pieces through persuasive, expressive, research, and reflective writing. Independent choice reading and participation in book clubs are integral components of the course in order to support the habit of sustained reading.

At the conclusion of this course, students will have the tools to effectively address these issues in verbal and written expression.

HONORS LANGUAGE ARTS IV– Explorations in the Art of Fiction and Non-Fiction

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA).

Full Year

Prerequisite: Language Arts III – grade of 90 or Language Arts III H - grade of 85.

Grade: 12

This course is an intensive exploration of style and theme in several genres of literature, including poetry and essays. Students will be expected to closely analyze texts and respond to these works with a high level of skill and sophistication. Success in the course is contingent upon the students' demonstration of excellence in language skills, motivation, and the ability to work independently. This full year course will fulfill the final year of the four-year State requirements for graduation in English Language Arts.

ADVANCED PLACEMENT LANGUAGE ARTS IV

(Literature and Composition)

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA).

Full Year

Prerequisite: AP English III, LA III Honors, or Honors American Studies II -grade of 90

Grade: 12

The overarching goal of this course is to help students develop mature habits of critical thinking as independent readers of and writers about literature. One of the focal points is the close, critical reading of complex poetry, drama, prose fiction, and expository non-fiction from the fifteenth through twentieth centuries. Students are expected to acquire a familiarity with numerous structures, genres, movements, and styles and how they developed, expressed meaning, and impacted upon one another. How is the operative question in this course; specifically, how authors developed their thematic visions artistically. While students will practice all modes of written discourse in this class, including descriptive, narrative, and poetic, the focus will be on expository, analytical writing. Students will be required to successfully complete various assignments involving literary criticism. Active engagement in this course will prepare students to take the Advanced Placement Examination in Literature and Composition offered by the College Board. This course fulfills the fourth year of the four-year Language Arts requirements necessary for graduation.

LANGUAGE ARTS TRANSITION (An ESL Course)

CREDITS: 5

Full Year

Grades: 9-12

This course is designed to support newcomer students as they develop their academic and social language skills. The New Jersey Student Learning Standards and WIDA standards are utilized to support content and skill acquisition, while also promoting English language learning. Students will be exposed to grade level texts and tasks while also working at their own level.

LANGUAGE ARTS ELECTIVES

The following elective courses are available. These courses are NOT acceptable substitutes for high school graduation Language Arts requirements.

INTRODUCTION TO PUBLIC SPEAKING/MODES OF WRITING

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-10

This course is a full year elective designed to introduce students to the realm of public speaking and strengthen students' writing skills using an integrated approach. Students will learn the fundamentals of public speaking including oratory, the use of gestures, inflection, word choice and performance. Writing will focus on descriptive, narrative and persuasive forms, and help strengthen essential writing skills including grammar and usage.

DRAMA AND ACTING I (Performing Arts Credit)

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

This course is designed as a fundamental approach to acting and theater. Acting skills are developed through a progression of units that explore basic stage movement, pantomime, improvisation, storytelling, extemporaneous speech, and the monologue form. Selected plays are also studied from literary as well as dramatic standpoints, culminating in the performance of short scenes. Students are introduced to the elements of script writing and theatrical terminology. These are utilized as they write, adapt, and perform scenes.

DRAMA AND ACTING II (Performing Arts Credit)

CREDITS: 5

Full Year

Prerequisite: Drama and Acting I

Grades: 10-12

In this course skills acquired in Drama and Acting I are strengthened and further developed. The characterization process is extensively explored as students create original as well as fictional characters. Techniques germane to the characterization process are further developed through the performance of advanced and sophisticated improvisations, as well as the creation of original scripts. Voice projection and diction are enhanced through exercises as well as the performance of scenes. Contemporary monologues are studied and performed, as are classical and contemporary plays. Students' writing and analytical skills are enhanced through the study of notable cinematic performances.

JOURNALISM I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-11

This course teaches the students all aspects of newspaper journalism. The various types of writing, editing, and reporting are studied. The techniques of interviewing and gathering information are emphasized. In addition, students perform all of the activities necessary to produce a school newspaper. Students learn about the early history of the newspaper, analyzing such important topics as yellow journalism, muckraking, the John Peter Zenger trial, libel, the Hazelwood Case, the Tinker Decision, attribution, *Publick Occurrences*, the *Boston News-Letter*, the first amendment, and the Inverted Pyramid style of writing.

JOURNALISM II

CREDITS: 5

Full Year

Prerequisite: Journalism I

Grades: 10-12

This course deals primarily with the writing and publishing of the school newspaper. Students learn advanced techniques of writing, interviewing, and reporting. The "laying out" of the paper is emphasized. Students also have the opportunity to do field work. Students will make use of software for paper layout.

THE TOTAL EXPERIENCE: CREATING THE YEARBOOK

CREDITS: 5

Full Year

Prerequisite: None

Grades: 12

This course is a full year elective designed to create the school yearbook. Members of the yearbook staff are expected to have a high level of maturity, the ability to work independently, organizational skills, and be able to put in the after-school time needed to create the finished product. This is a wonderful opportunity for the yearbook staff to exercise their creativity through computer design, photography, creative writing, copy writing, and project management. The culminating product, our yearbook, Reflections, will demonstrate the creative talents of the students to tell the year's captivating story of MTHS.

CREATIVE AND ARGUMENTATIVE DISCOURSE

CREDITS: 5

Prerequisite: None

Grades: 11-12

This course will help students to develop their oral and written communication while also honing critical reading and listening skills. Students will have the opportunity to understand complex issues and express their ideas through creative and argumentative writing and speaking tasks. Students will work both independently and with peers to understand how critical literacy shapes our perception of society and participation in it.

SAT VERBAL

CREDITS: 2.5

Half Year

Prerequisite: None

Grades: 10-11

This semester course is an elective for students who want to improve their S.A.T. Verbal section scores. It is offered in conjunction with S.A.T. Mathematics, which will be offered in opposite semesters. Students in S.A.T. Verbal will develop reasoning skills and the conceptual knowledge base needed for success on the Scholastic Aptitude Test (S.A.T.). Test taking strategies will also be discussed. Over the semester simulated S.A.T. tests will be administered to prepare for the actual test. This course cannot be used to fulfill the Language Arts high school graduation requirements.

MATHEMATICS

The Mathematics Department offers a wide range of courses for every level of ability. There are three sequences from which to choose: the Dynamics College Preparatory Sequence, the Traditional College Preparatory Sequence, and the Honors College Preparatory Sequence. It is recommended that placement into any sequence takes into consideration the ability of the student, his/her future goals, performance in previous math courses, and performance on standardized tests.

Courses taken for advancement purposes in an approved college program or in a state approved 120 hour program must have the prior approval of the high school principal, department coordinator and guidance counselor. Students must also show evidence of a grade of 80 or better in the course and must receive a grade of 80 or better on the high school mathematics department final examination in order to advance to the next level. These courses for advancement purposes do not receive High School credit nor do they receive credit toward the calculation of rank in class or the GPA.

Students considering a college major in mathematics, science, engineering, or other technical fields are strongly urged to successfully complete Computer Programming I/AP Computer Science Principles and AP Computer Science A in addition to four years of college preparatory mathematics culminating with Advanced Placement Calculus AB or BC in order to be adequately prepared for these fields.

All mathematics courses in grades 9-11 will include preparation for the NJSLA. The level of this preparation is commensurate with the level of the class.

Monroe Township Schools
Mathematics Sequence 2021 – 2022

Grades K-4	Grades 5-6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Mathematics Grades K-4	Mathematics Grades 5-6	Mathematics Grade 7	Mathematics Grade 8	Algebra I (A/B)	Dynamics of Geometry	Dynamics of Algebra II	Dynamics of Trig/Math Analysis and/or Elective
				Algebra I	Geometry	Algebra II	Precalculus and/or Elective
			Middle School Algebra I Grade 8	Algebra I	Geometry (H)	Algebra II (H)	Precalculus (H) and/or Elective
	Geometry	Algebra II		Precalculus	Calculus (H) and/or Elective		
	Geometry (H)	Algebra II (H)		Precalculus (H)	AP Calculus AB		
	Accelerated Mathematics Grades 5-6	Middle School Algebra I Grade 7	Middle School Geometry Grade 8	Algebra II (H)	Precalculus (H)	AP Calculus AB	AP Calculus BC

Mathematics Electives:

- Calculus (H)*
- Computer Programming*
- AP Computer Science Principles*
- AP Computer Science A*
- Application Development (H)*
- Web Design (H)*
- AP Statistics*
- Probability & Statistics*
- Senior Option College Level Courses*

Other:

- SAT Mathematics (semester course)*

Board Approved: 12/16/09

THE DYNAMICS COLLEGE PREPARATORY SEQUENCE

The Dynamics College Preparatory Sequence is designed for those students planning to continue their education but who need to learn at a slower pace.

ALGEBRA I A/B

CREDITS: 10

Prerequisite: It is recommended that any current Grade 8 Mathematics student with a grade of "74" or lower in Grade 8 Mathematics or teacher recommendation will be placed in Algebra I A/B.

Algebra I A/B is an alternate first course of the Dynamics College Preparatory Sequence. This course meets every day and is designed for students whose mathematical abilities and learning styles lend themselves to studying through a more concrete approach. Topics included are: basic concepts of algebra, integers, equations, inequalities, absolute value, factoring, rational expressions, solving and graphing linear equations and systems of equations, real numbers and square roots, and functions and relations.

This course is specifically designed for those students who have been identified through teacher recommendation and prior academic history as needing additional instruction for a successful freshman experience. In addition, this course will prepare students with higher order thinking skills in order to perform tasks with adherence to the New Jersey Student Learning Standards and NJSLA. Students will have the opportunity to strengthen skills in test-taking strategies, note-taking strategies, and study-skills as well as transitioning into the high school environment. Differentiated instruction is used for all participants once areas of strengths and weaknesses have been identified. A pre and post test will be used to determine growth. **Five (5) of the ten (10) credits for this course can be used to fulfill the mathematics requirement for graduation.**

DYNAMICS OF GEOMETRY

CREDITS: 5

Prerequisite: It is recommended that Algebra I A/B be successfully completed before selecting this course.

Dynamics of Geometry is the second course in the Dynamics College Preparatory Sequence. This course is designed for students whose mathematical abilities lend themselves to studying through a more concrete approach and incorporating examples that accommodate a variety of learning styles. This course emphasizes applications rather than the formal deductive proofs of geometry. Topics included are: points, lines, planes, segments, angles, parallel and perpendicular lines, congruent and similar triangles, polygons, proportions, right triangles, circles, perimeter, area, and volume.

DYNAMICS OF ALGEBRA II

CREDITS: 5

Prerequisite: It is recommended that Dynamics of Geometry be successfully completed before selecting this course.

Dynamics of Algebra II is the third course in the Dynamics College Preparatory Sequence. This course is designed for students whose mathematical abilities lend themselves to studying through a more concrete approach and incorporating examples that accommodate a variety of learning styles. This course covers most, but not all, of the major topics offered in the regular Algebra II course.

Topics included are: rational expressions, irrational and complex numbers, quadratic equations and functions, equations and numerical methods, analytic geometry and conic sections, exponential and logarithmic functions, and matrices and determinants.

DYNAMICS OF TRIG/MATH ANALYSIS

CREDITS: 5

Grade : 12

Prerequisite: It is recommended that Dynamics of Algebra II be successfully completed. Also, students must be in the 12th grade in order to select this course.

Dynamics of Trig/Math Analysis is a twelfth grade course and is the fourth course in the Dynamics College Preparatory Sequence. This course is designed for students whose mathematical abilities lend themselves to studying through a more concrete approach and incorporating examples that accommodate a variety of learning styles. Included in this course are advanced algebraic topics that were not included in Dynamics of Algebra II. In addition, topics from trigonometry and mathematical analysis are also included to provide a sound mathematical program that will better prepare students for coursework at the post secondary level. Topics included are: linear, quadratic and polynomial functions, exponents, logarithms, trigonometric functions and identities, solving trigonometric equations, applications involving triangles, inverse trigonometric functions, advanced graphing techniques, polar coordinates and graphing polar equations. Due to the large number of topics that will be covered, emphasis will be placed on application of concepts rather than their theoretical basis.

THE TRADITIONAL COLLEGE PREPARATORY SEQUENCE

The traditional college preparatory sequence is the traditional program designed for students planning to pursue a college or post secondary education.

ALGEBRA I

CREDITS: 5

Prerequisite: It is recommended that current Grade 8 students should have a grade of "75" or higher in Grade 8 Mathematics in order to select Algebra I.

Algebra I is the first course in the traditional college preparatory sequence. Some topics included are: the basic concepts of algebra, operations with integers, solving equations and word problems, solving and graphing inequalities, absolute value, polynomials, rational algebraic expressions, systems of equations, irrational numbers, and functions.

GEOMETRY

CREDITS: 5

Prerequisite: It is recommended that Algebra I be successfully completed before selecting this course. It is recommended that students have a grade of 70 or higher in Middle School Algebra I before selecting this course.

Geometry begins in Grade 10 and is the second course in the traditional college preparatory sequence. The course is designed to stimulate and develop clear, logical, creative thinking through the study of the basic structure of geometry, geometric relationships, and formal deductive proofs. Some topics included are: points, lines, planes, segments, angles, parallel and perpendicular lines, congruent and similar triangles, polygons, proportions, right triangles, circles, constructions, and perimeter, area, and volume.

ALGEBRA II

CREDITS: 5

Prerequisite: It is recommended that Geometry be successfully completed before selecting this course.

Algebra II is the third course in the traditional college preparatory sequence. The course extends the processes of algebra introduced in Algebra I and uses the geometrical concepts from Geometry to produce a more meaningful, in-depth approach to new topics in algebra. Topics included are: rational expressions, irrational and complex numbers, quadratic equations and functions, equations and numerical methods, analytic geometry and conic sections, exponential and logarithmic functions, and matrices and determinants.

PRECALCULUS

CREDITS: 5

Prerequisite: It is recommended that students have a grade of 70 or higher in Algebra II before selecting this course.

Precalculus is the fourth course in the traditional college preparatory sequence. It is designed to provide a basic course in trigonometry and a sufficient background in college algebra and analytic geometry to prepare the student for the study of calculus. Some topics included are: polynomials, inequalities, functions, exponents and logarithms, trigonometric functions, identities, trigonometric equations, solving triangles, inverse trigonometric functions, advanced graphing techniques, polar coordinates, complex numbers, sequences & series, combinatorics, and probability.

THE HONORS COLLEGE PREPARATORY SEQUENCE

The honors sequence is a rigorous program of study for students with exceptional mathematical ability and who wish to study mathematics in great depth.

GEOMETRY (HONORS)

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Prerequisite: Students must have a grade of 80 or higher in Middle School Algebra I before selecting this course. **Accelerated students who have completed Middle School Geometry but have not met the criteria for Algebra II (Honors) should be placed in Geometry (Honors).**

Geometry (Honors) is the first course in the honors college preparatory sequence. It is a rigorous and challenging course designed for the student with exceptional mathematical ability and leading ultimately to the study of calculus in grade 12. Formal deductive proofs are emphasized. Some topics included are: points, lines, planes, segments, angles, parallel and perpendicular lines, congruent and similar triangles, polygons, proportions, right triangles, circles, constructions, perimeter, area, volume, coordinate geometry, geometric loci, and inequalities.

ALGEBRA II (HONORS)

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Prerequisite: It is recommended that students have a grade of 80 or higher in Geometry (Honors) or a grade of 85 or higher in Middle School Geometry before selecting this course. **It should be noted that 9th grade students who appeal to withdraw from Algebra II (Honors) will be placed in Geometry (Honors). No 9th grade students will be placed in traditional Algebra II.**

Algebra II (Honors) is the second course in the honors college preparatory sequence. It is a rigorous and challenging course designed for the student with exceptional mathematical ability and leading

ultimately to the study of calculus in grade 12. Topics included are: rational expressions, irrational and complex numbers, quadratic equations and functions, equations and numerical methods, analytic geometry and conic sections, exponential and logarithmic functions, and matrices and determinants.

PRECALCULUS (HONORS)

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Prerequisite: It is recommended that students have a grade of 80 or higher in Algebra II (Honors) before selecting this course.

Precalculus (Honors) is the third course in the honors college preparatory sequence. It is a rigorous and challenging course designed for the student with exceptional mathematical ability and leading ultimately to the study of calculus in Grade 12. Some topics included are: the trigonometric functions, identities, trigonometric equations, solving triangles, inverse trigonometric functions, advanced graphing techniques, polar coordinates and complex numbers, polynomial functions, conic sections, vectors and determinants, sequences and series, statistics, probability, and an introduction to calculus. This course makes extensive use of the graphing calculator. Completion of a summer preparation packet is required.

CALCULUS (HONORS)

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Prerequisite: It is recommended that students have a grade of 80 or higher in Precalculus before selecting this course.

Calculus (Honors) is designed for students who need additional mathematics beyond Trigonometry/Math Analysis and do not wish to take Advanced Placement Calculus. Topics included are: relations, functions, inverses, trigonometric functions, limits, target values, differentiation, linear approximations, differentials, maxima, minima, Mean Value Theorem, Newton's Method, related rates, antiderivatives, initial value problems, definite integrals, Fundamental Theorem of Calculus, indefinite integrals, integration by substitution, numerical integration, areas between curves, and volumes of solids of revolution. This course makes extensive use of the graphing calculator. Completion of a summer preparation packet is required.

ADVANCED PLACEMENT CALCULUS AB

CREDITS: 10

(This course receives advanced placement weighting for the calculation of the GPA.)

Prerequisite: It is recommended that students have a grade of 80 or higher in Precalculus (Honors) before selecting this course.

Advanced Placement Calculus AB is the fourth course of the honors college preparatory sequence. This course will meet every day in the double-period block. It is a rigorous and challenging course designed for the student with exceptional mathematical ability needing a strong background in mathematics for future academic work at the college level. Topics included are: limits, target values, differentiation, linear approximations, differentials, maxima, minima, Mean Value Theorem, Newton's Method, related rates, antiderivatives, initial value problems, definite integrals, Fundamental Theorem of Calculus, indefinite integrals, integration by substitution, numerical integration, areas between curves, the natural logarithmic function, the exponential functions, inverse trigonometric functions and related integrals, integration by parts, integrals involving trigonometric functions, trigonometric substitutions, slope fields, volumes of solids of revolution, and volumes by cylindrical shells. This course makes extensive use of the graphing calculator. Completion of a summer preparation packet is required.

ADVANCED PLACEMENT CALCULUS BC

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA.)

Prerequisite: It is recommended that students have a grade of 80 or higher in AP Calculus AB before selecting this course.

Advanced Placement Calculus BC is the fifth course of the honors college preparatory sequence. It is a rigorous and challenging course designed for the student with exceptional mathematical ability needing a strong background in mathematics for future academic work at the college level. Topics included are: all AP Calculus AB topics and, in addition, the following topics are included: parametric, polar, and vector functions; analysis of planar curves given in parametric form, polar form, and vector form; numerical solution of differential equations using Euler's method; L'Hôpital's Rule; derivatives of parametric, polar, and vector functions; applications of integrals; antiderivatives by substitution of variables, parts, and simple partial fractions; improper integrals; solving logistic differential equations and using them in modeling; polynomial approximations and series; concepts of series; series of constants; geometric series, harmonic series, alternating series; terms of series; ratio test for convergence and divergence; comparing series to test for convergence or divergence; Taylor series; Maclaurin series; power series; radius and interval of convergence of power series; and Lagrange error bound for Taylor polynomials. This course makes extensive use of the graphing calculator. Completion of a summer preparation packet is required.

MATHEMATICS ELECTIVES

COMPUTER PROGRAMMING

CREDITS: 5

Prerequisite: It is recommended that students have a grade of 75 or higher in Algebra I or Algebra I AB before selecting this course.

Using the Microsoft Visual Basic computer programming language, Computer Programming is designed to introduce the fundamental concepts of computer programming. The course emphasizes problem-solving, design skills and program analysis and testing. Students will solve problems in mathematics, science, business and other areas. Hands-on use of the computer is emphasized.

ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

CREDITS: 5

Grade: 9-11

(This course receives advanced placement weighting for the calculation of the GPA.)

Prerequisite: It is recommended that students have a grade of 85 or higher in Algebra I. This course is a prerequisite for any student interested in taking AP Computer Science A.

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. Students develop computational thinking skills vital for success in all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, work individually and collaboratively to solve problems, and discuss and write about the importance of these problems and the impacts to their community, society, and the world.

ADVANCED PLACEMENT COMPUTER SCIENCE A

CREDITS: 5

Grade: 10-12

(This course receives advanced placement weighting for the calculation of the GPA.)

Prerequisite: Students must obtain an 85 or higher in, AP Computer Programming Principles or a 90 or higher in Computer Programming before selecting this course.

Advanced Placement Computer Science A is the second course in the computer programming sequence of courses and includes an in-depth study of the JAVA computer programming language. This course emphasizes the design and testing of computer programs and focuses on the analysis of complex problems from a wide variety of areas. Topics included are:

- I. Object oriented program design (program design, class design)
- II. Program implementation (implementation techniques, programming constructs, and Java library classes (included in the A-level AP Java Subset)
- III. Program analysis (testing, debugging, understanding and modifying existing code, extending existing code using inheritance, understanding error handling, reasoning about programs, analysis of algorithms, numerical representations and limits)
- IV. Standard data structures (simple data types, classes, one-dimensional arrays)
- V. Standard algorithms (operations on A-level data, searching, sorting)
- VI. Computing in context (major hardware components, system software, types of systems, responsible use of computer systems)

Students planning to major in a technical field at the college level are strongly urged to complete this course.

ADVANCED WEB DESIGN USING PHP AND Web MySQL (HONORS)

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Prerequisite: It is recommended that Advanced Placement Computer Science A be successfully completed before selecting this course.

Advanced Web Design Using PHP and Web MySQL (Honors) is the third or fourth course in the sequence of computer programming courses. This course relies heavily on prior knowledge to explore advanced website design using HTML, CSS, PHP, MySQL and more. The course concludes with students designing a professional, interactive website. Topics included are:

- I. Designing a web page with the HTML basics.
- II. Controlling the style and layout of multiple web pages using CSS.
- III. Designing dynamic and interactive web pages using PHP in coordination with the MySQL database.
- IV. Adding functionality to web pages using Javascript.

Students planning to major in a technical field at the college level are strongly urged to complete this course.

APPLICATION DEVELOPMENT (HONORS)- Not offered the 21-22 SY. Offered during 22-23 SY.

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Prerequisite: It is recommended that Advanced Placement Computer Science A be successfully completed before selecting this course.

Using a variety of development software, Application Development is an advanced course designed for students interested in exploring and designing mobile applications for iOS, Android and/or other mobile operating systems. The course relies heavily on prior knowledge (Java) in order to work at an accelerated and independent pace to develop applications for mobile devices. Independent, hands-on development and research are strongly emphasized.

SAT MATHEMATICS

CREDITS: 2.5

Prerequisite: Students must have successfully completed Algebra I and Geometry or be in 11th grade or higher to enroll in this course.

This semester course is an elective for students who want to improve their SAT mathematics section scores. It is offered in conjunction with SAT Language Arts, which will run in opposite semesters. Students in SAT Mathematics will develop reasoning skills and the conceptual knowledge base needed for success on the SAT examination. Test-taking strategies and techniques will also be discussed. Over the semester, simulated practice SAT tests will be administered to prepare for the actual test. This course cannot be used to fulfill the mathematics requirement for graduation.

PROBABILITY & STATISTICS

CREDITS: 5

Prerequisite: It is recommended that students have a grade of 75 or higher in Algebra II or a 90 or higher in Dynamics of Algebra II before selecting this course.

Probability & Statistics is an elective course for those who have successfully completed Algebra II. It is designed for those students interested in pursuing a career in business, marketing, psychology, mathematics or any field requiring data analysis. Topics included are: graphical techniques, analysis of data, probability, permutations, combinations, conditional probability, the Binomial Distribution, the Poisson Distribution, the normal curve, random sampling, Central Limit Theorem, hypothesis testing, linear correlation and regression, and the Chi-Square Distribution. The graphing calculator is used extensively in this course.

ADVANCED PLACEMENT STATISTICS

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA.)

Prerequisite: It is recommended that students have a grade of 80 or higher in Algebra II Honors or a grade of 90 or higher in Algebra 2 before selecting this course.

Advanced Placement Statistics is an elective course for those who have successfully completed Algebra II. It is designed for those students interested in pursuing a career in business, marketing, psychology, mathematics or any field requiring data analysis. This AP course in statistics will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

- I. Exploring Data: Describing patterns and departures from patterns
- II. Sampling and Experimentation: Planning and conducting a study
- III. Anticipating Patterns: Exploring random phenomena using probability and simulation
- IV. Statistical Inference: Estimating population parameters and testing hypotheses

Topics included are: graphical techniques, analysis of data, probability, permutations, combinations, conditional probability, the Binomial Distribution, the Poisson Distribution, the normal curve, random sampling, Central Limit Theorem, hypothesis testing, linear correlation and regression, t-distribution, and the Chi-Square Distribution.

The graphing calculator is used extensively in this course. Students with the appropriate mathematical background are encouraged to take both AP Statistics and AP Calculus in high school.

MUSIC

These courses allow a student to develop fine motor coordination, listening, language, research, social and expressive skills through music. Whether a student chooses one or all of the courses offered, he/she will be exposed to writing, listening, performing, and creating music of all genres.

MUSIC THEORY I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

Music Theory II is a second level course for the student who has successfully completed Music Theory I or has teacher approval. It is designed to deliver more advanced instruction of the elements of music. This also will be accomplished through reading, writing and analyzing music of all styles. Students will gain valuable experience creating their own music using the Finale music software program. Successful completion of this course will help prepare the students for the Advanced Placement Music Theory course.

MUSIC THEORY II

CREDITS: 5

Full Year

Prerequisite: Music Theory I or Teacher Recommendation

Grades: 9-12

Music Theory II is a second level course for the student who has successfully completed Music Theory I or has teacher approval. It is designed to deliver more advanced instruction of the elements of music. This also will be accomplished through reading, writing and analyzing music of all styles. Students will gain valuable experience creating their own music using the Finale music software program. Successful completion of this course will help prepare the students for the Advanced Placement Music Theory course. Students in Wind Ensemble or Concert Choir in the previous year who have not taken Music Theory I may be eligible for Music Theory II with teacher recommendation.

ADVANCED PLACEMENT MUSIC THEORY

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisite: Successful completion of the Music Theory course or by teacher recommendation

Grades: 10-12

This course is designed to introduce students to the elements of music through reading, writing, listening and analyzing music of all styles. An introduction to MIDI and Music Technology will also be included. Advanced Placement Music Theory provides an excellent foundation for the further study of music in college and the Advanced Placement exam.

PERFORMING ARTS

MUSICAL THEATRE

CREDITS: 5

Full year

Prerequisite: None

Grades: 10-12

The musical theatre course is a year long course of study designed to educate students in grades 10-12 in the history, practice, performance and critique of musical theatre. Students will learn the fundamentals of audition, rehearsal, acting, and singing techniques and will develop strategies to combine these techniques to create a more professional performance. Students will study the representation of character and emotion as well as the use of language and stage conventions as related to written and performed musical theatre. Students will learn to work together to rehearse and perform musical theatre scenes and songs, and to establish a positive environment in which to evaluate their own work as well as others' work.

Topics Include:

- a. Audition techniques/ setting up a book of repertoire
- b. Sense-memory and improvisational exercises
- c. The study of combined acting and vocal technique
- d. Memorization, rehearsal, and performance of musical songs/scenes
- e. Study of the history of musical theatre
- f. The critique of professional actors as well as of one another

CONCERT BAND

CREDITS: 5

Full Year

Prerequisite: Must play a woodwind, brass or percussion instrument

Grades: 9

The Concert Band is full year courses open to students in grade 9 possessing basic/intermediate skills on woodwind, brass and percussion instruments. Students in this ensemble perform music of an intermediate level (Grade III) with emphasis on developing technical ability, characteristic tonality, and knowledge of phrasing. Students in this course will be eligible for Symphonic Band the next year, and advanced students are encouraged to audition for the Wind Ensemble, Percussion Ensemble, Jazz Ensemble and Region II Bands.

SYMPHONIC BAND

CREDITS: 5

Full Year

Prerequisite: Concert Band or teacher recommendation

Grades: 10-12

The Symphonic Band is full year courses open to students in grades 10-12 possessing basic/intermediate skills on woodwind, brass and percussion instruments. Any instrumental music student who does not get placed into the Wind Ensemble will perform with this ensemble. Students in this ensemble perform music of an intermediate level (Grade III-IV) with emphasis on developing technical ability, characteristic tonality, and knowledge of phrasing. Advanced students are encouraged to audition for the Wind Ensemble, Jazz Ensemble and Region II Bands.

PIANO I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

This course provides group instruction for students at the beginning level. Students learn to read music and develop technical facility at the piano through preparation and performance of progressively difficult music. Keyboard ensemble activities provide additional opportunities for musical development. The course will cover piano technique, such as proper posture and hand positions, finger patterns and exercises, the reading of treble and bass clef, major and minor scale studies, and selected etudes. The full year course will also focus on the fundamentals of music theory and how they apply to keyboarding. Students will perform a variety of repertoire from classics, folk, and jazz. The course will include two piano recitals; both mid-year and end of the year.

PIANO II

CREDITS: 5

Full Year

Prerequisite: Piano I and Teacher Recommendation

Grades: 9-12

This course provides group instruction for students who are second-year advancing beginners. Students continue to learn to read music and develop technical facility at the piano through preparation and performance of progressively difficult music. Keyboard ensemble activities provide additional opportunities for musical development. The course will cover piano technique, such as proper posture and hand positions, finger patterns and exercises, the reading of treble and bass clef, major and minor scale studies, and selected etudes appropriate for the second-year pianist. The full year course will continue to focus on the fundamentals of music theory and how they apply to keyboarding. Students will perform a variety of repertoire from classics, folk, and jazz. The class will provide performance opportunities both in and outside the classroom.

WIND ENSEMBLE (HONORS)

CREDITS: 5

Full Year

Prerequisite: Audition

Grades: 9-12

The Wind Ensemble is a full year course designed for woodwind, brass and percussion students with advanced technical abilities who wish to broaden their musical knowledge and improve their performance level. Placement into the Wind Ensemble is based upon blind auditions which occur prior to scheduling. The Wind Ensemble studies and performs music on an advanced level (Grades IV and V) with emphasis on developing musical maturity appropriate to advanced high school literature. Advanced students are encouraged to audition for the Region II and All State Bands. Performances include may not be limited to school concerts and other local festivals.

PERCUSSION ENSEMBLE (HONORS)

CREDITS: 5

Full Year

Prerequisite: Audition

Grades: 9-12

The Percussion Ensemble is designed to provide performance opportunity for the percussion students who prefer to perform on an ensemble made up of strictly percussionists. Specific percussion pedagogy is a focus in this class as well as the study and performance of literature of a more advanced level (Grades IV-VI). Advanced students are encouraged to audition for the Region II and All State Bands. Performances include but may not be limited to school concerts and other local festivals.

PERCUSSION ENSEMBLE

CREDITS: 5

Full Year

Prerequisite: Audition

Grades: 9-10

The Percussion Ensemble is designed to provide a performance opportunity for the percussion students who prefer to perform in an ensemble made up of strictly percussionists. Specific percussion pedagogy of a basic to intermediate level is a focus in this class as well as the study and performance of literature of an intermediate level (Grades III-IV). Advanced students are encouraged to audition for the Region II and All State Bands. Performances include but may not be limited to school concerts and other local festivals.

MIXED CHORUS

CREDITS: 5

Full Year

Prerequisite: None

Grades: 10-12

Mixed Chorus is a class open to all students in grades 10, 11, and 12. The class emphasizes the singing of choral music written for three or more vocal parts. A broad spectrum of choral literature which stresses vocal development, sight-singing and choral ensemble technique is studied. Students will learn music terminology and notation. Students are required to perform in the Winter and Spring concerts.

FRESHMAN CHORUS

CREDITS: 5

Full Year

Prerequisite: None

Grade: 9

Freshman Chorus is an entry level course. This class stresses vocal development, sight-singing and choral ensemble technique. Students study the nature and placement of the voice in the choral setting. Students will learn music terminology and notation. A broad spectrum of choral literature is studied and performed. Students accept the performance calendar as a condition of participation and as part of the course requirement. The more advanced choral student is encouraged to audition and participate in Region and All-State performing ensembles.

TREBLE (HONORS)

CREDITS: 5

Full Year

Prerequisite: Audition Only

Grades: 10-12

Women's Chorale is an advanced chorus. This program is being offered to meet the needs of an increased talented female population. The singing of choral music written for women's voices in three, four or more parts is emphasized. It is by audition only for women in grades 10, 11, and 12. This course stresses vocal development, sight-singing, and choral ensemble technique. Students will learn music notation and terminology. Students study the nature and placement of the voice in the choral setting. A broad spectrum of choral literature is studied and performed. Students are encouraged to audition and participate in Region, All-State and All-Eastern performing ensembles. Students accept the performance calendar as a condition of participation and as part of the course requirement.

CONCERT CHOIR (HONORS)

CREDITS: 5

Full Year

Prerequisite: Audition Only

Grades: 10-12

Concert Choir is the most advanced chorus in the choral program. It is a soprano/alto/tenor/bass chorus by audition only. This course stresses vocal development, sight-singing and choral ensemble technique. Students study the nature and placement of the voice in the choral setting. Students will learn music terminology and notation. A broad spectrum of advanced choral literature including selections using mixed meter are studied and performed. Students are encouraged to audition and participate in Region, All-State and All-Eastern performing ensembles. Students accept the performance calendar as a condition of participation and as part of the course requirement.

HISTORY OF POPULAR MUSIC

Credits: 5

Full Year

Prerequisite: None

Grades: 9-12

This course examines the historical significance of popular music in the United States from the late nineteenth century to the present.

No musical training is necessary to enroll in the course, however we will think about how to analyze music as a dynamic historical force, examining it not only as text, but also in its embedded contexts: the cultural, social, political, and economic dimensions of genres ranging from Tin Pan Alley to blues, jazz, rhythm and blues, country, folk, soul, rock, disco, hip-hop, and classical music. Working toward a set of overarching themes, we will explore popular music as an art form, a business, a medium for shaping identity and making meaning, an entity encompassing both conflict and consensus, a local, national, and global phenomenon, and a key area in the life of Americans.

HEALTH and PHYSICAL EDUCATION

PHYSICAL EDUCATION / HEALTH

CREDITS: 5

Grades: 9-12

The co-educational physical education program is designed to incorporate the most desirable aspects of team, dual, individual, and recreational activities. Health-related fitness is emphasized. Each student is required to take three quarters of physical education and one quarter of health each year in school.

Students in grades nine and ten are exposed to a wide variety of sports, games and physical activities.

Conditioning activities concentrate on strength, muscular endurance, flexibility, body composition and cardiovascular fitness. The units offer stress fundamental skills and knowledge. Following each unit, individual skills, knowledge of rules, and understanding of techniques are evaluated.

Health and physical education classes are courses required by the state of New Jersey and must be passed each year. If a student fails health and physical education for the year he/she is strongly encouraged to seek out a remedial summer school class.

GRADE 9

Health Education for grade nine consists of units on mental health, the human life cycle, sexually transmitted diseases, and drugs. Students successfully completing the course will have a better understanding of how mental health relates to total health and will discover ways to improve and maintain their own mental health. The family living unit deals with becoming sexually mature and a study of the life cycle from human reproduction through the birth process. The units on sexually transmitted diseases and drugs serve to increase the student's awareness regarding the beneficial effects of good health practices.

GRADE 10

The tenth grade Health Education program is devoted to driver education theory. This course will meet the mandate for 30 hours of classroom instruction and includes all aspects of driving techniques and safety, automotive care, financial responsibility, defensive driving, and the study of traffic laws and regulations. The goal of the unit is to provide the student with the knowledge and skills needed to become a safe, efficient user of the highway transportation system as a driver and a passenger.

GRADE 11

Grade eleven Health Education deals with the topics of physiology of exercise and the effects of safe exercise. The physiology of exercise unit emphasizes lifetime fitness through discussion and laboratory activities dealing with the health-related aspects of fitness. Students will gain an awareness of health-related fitness and the lifelong importance of maintaining and developing good health. In addition, the subject matter presented will help students to understand the reasons for many exercise related injuries; increase prevention knowledge with the hope of eliminating or minimizing the cause of many injuries; and encourage the development of judgment skills. Students will come to the realization that an understanding of the functioning of the human body is directly related to the principles of health maintenance. Grade eleven students will also have the option to elect Strength and Conditioning I to fulfill their Health and Physical Education requirement.

GRADE 12

Grade twelve Health Education course deals with life skills, life choices and contemporary health issues in the arena of a career-oriented single lifestyle and/or the institution of marriage. Topics presented include communication skills, goal setting and decision-making, assertiveness training, conflict

resolution and a profile of marriage. The course is concerned with personal relationships and the natural progression of experiences that draw young men and women almost magnetically toward marriage. The examination of marriage and parenthood helps students to realize that preparation for marriage is a combination of knowledge acquisition and attitude development. Students are challenged to develop a realistic view of a single lifestyle and married life and are encouraged to make their own decisions, responsibly, based on factual information.

Grade twelve students will also have the option to elect Strength and Conditioning I or II to fulfill their Health and Physical Education requirement.

RHYTHMIC MOVEMENT

CREDITS: 5

FULL YEAR

Grade: 10-12

Prerequisite: Grade of 85 or better in Physical Education and current PE teacher's recommendation.

Course Description: Rhythmic Movement is a yearlong course that will fulfill the New Jersey state mandated Physical Education requirement. The purpose of this course is to introduce students to various rhythmic movement activities. This course is designed for students who have an interest in activities such as dance, yoga and personal fitness, as well as the desire to expand their knowledge in these areas. The goal of this course is for students to learn, understand, demonstrate, apply, and create concepts involved in rhythmic movements during class with hopes of discovering a lifelong activity that students enjoy and can participate in beyond the classroom. **Students will participate in the physical portion of the course for three marking periods and will be required to fulfill their respective grade level Health requirement for one marking period.**

Course Objectives:

- Understand the health benefits associated with participating in rhythmic movement activities
- Understand the various health and skill related components involved in rhythmic movement
- Discover and utilize technological resources that can be used in life beyond the classroom (Just Dance, YouTube, iMovie)
- Understand how to use rhythmic movement for personal fitness (Dance, Yoga, Zumba, Aerobic Dance, Ballet Barre, Kickboxing, Pilates, Body Weight Toning)

Movement Modalities:

Dance

- Learn and demonstrate dances from different cultures (i.e., Bollywood, Salsa, Bachata, Hula, Tango, Mambo)
- Learn and demonstrate dances and understand the history behind them (i.e., Ballroom, Waltz, Swing, Jive)

- Learn and demonstrate different genres of dance (Ballet, Hip Hop, Jazz, Lyrical)
- Learn and demonstrate dance that is used in social settings (Wobble, Soulja Boy, Cupid Shuffle)
- Learn how to choreograph dances using rhythm and counting
- Create a dance routine that can be performed/ taught
- Teach dance routine using skills such as counting, rhythm, and cueing.
- Utilize technological resources to analyze skills and provide feedback

Yoga

- Understand how to use yoga for stress management
- Learn and demonstrate the different types of yoga (Vinyasa, Hatha, Kundalini, Yin, Restorative)
- Learn and demonstrate breathing techniques (Pranayama, Lion's Breath, Breath of Fire)
- Learn and demonstrate meditation techniques (Mindfulness, Progressive Muscle Relaxation, Guided Meditation)
- Identify and demonstrate an array of yoga poses
- Understand and explain the anatomical focus of each pose and movement
- Learn how to create a yoga sequence that includes a warm up, sequence, cool down and/or meditation
- Create a yoga sequence that can be taught to the class
- Teach yoga flow using skills such as knowledge of poses, demonstration, and cueing

STRENGTH TRAINING AND CONDITIONING I

CREDITS: 5

Full Year

Grades: 11-12

Prerequisite:

- Student must average a grade of 85 or better in Physical Education
- Student must complete an application for the course
- Student must meet the physical assessment criteria to be given during the application process sophomore year

Course Prerequisite:

- Fulfill the mandatory Physical Education Requirement
- Fit under the school to work category
- Educate students who are interested in pursuing professional careers in the Health, fitness, physical education and physical therapy fields.
- Train students who are interested in pursuing and enhancing their own athletic careers at the high school and collegiate level.

Course Description:

This course will expose students to the essentials of strength training and conditioning. Students will be introduced to a multitude of exercise prescription and design methods for individuals as well as for athletes in a team setting. **Students will participate in the physical portion of the course for three marking periods and will be required to fulfill their respective grade level Health requirement for one marking period.**

Topics Include:

- Structure and function of the muscular, respiratory and cardiovascular systems
- Biomechanical concepts
- Responses and adaptations to training
- Metabolic and nutritional aspects of exercise and training
- Aerobic and anaerobic exercise prescription
- Speed development and plyometric training
- Free weight and machine exercise techniques

Course Rationale:

The health, fitness, recreation and sports industry is continuing to grow rapidly. The strength training and conditioning course is designed for students who have an interest in the fitness fields and the desire to expand their knowledge in the areas of exercise prescription. Students completing the course would have the necessary background in order to pursue a career as a fitness trainer and professional.

STRENGTH TRAINING AND CONDITIONING II

CREDITS: 5

Full Year

Grade: 12

Course Prerequisite:

- Student must average a grade of 85 or better in Strength and Conditioning I
- Student **must** meet the physical assessment criteria given during Strength and Conditioning I

This course is designed to:

- Fulfill the mandatory Physical Education Requirement
- Fit under the school to work category
- Educate students who are interested in pursuing professional careers in the Health, fitness, physical education and physical therapy fields.
- Train students who are interested in pursuing and enhancing their own athletic careers at the high school and collegiate level.

Course Description: This course will be a continuation of S & C I, Students will build on the essentials of strength training and conditioning. The purpose of this course is to introduce students to the science and physiology behind strength training and conditioning. In general, the physiology of strength training and conditioning is poorly understood by the general public. Thus, part of the focus of this course is to dispel some of the myths surrounding strength training by using sound physiology to understand mechanisms and responses. Students will acquire a theoretical knowledge of the neuromuscular, biomechanical, and metabolic aspects of muscular strength and conditioning programs for various athletic and non-athletic populations. Course content includes a review of resistance training intended to promote the use of a structured scientific approach in the prescription of progressive resistance training and various training techniques.

Students will be able to write their own exercise prescription and design methods for individuals as well as for athletes in a team setting. Students will participate in the physical portion of the course for three marking periods and will be required to fulfill their respective grade level Health requirement for

one marking period.

- Biomechanics of resistance exercise
- Bone, muscle, and connective tissue adaptations to physical activity
- Cardiovascular and respiratory anatomy and physiology: responses to exercises
- Physiological adaptations to anaerobic and aerobic endurance training programs
- Age and sex related differences and their implications for resistance exercises
- Performance enhancing substances: effects, risks, and appropriate alternatives
- Nutritional factors in health and performance
- Administration, scoring, and interpretation of selected tests
- Program Design Aerobic and Anaerobic
- Program Design Training Variation (Periodization)

Course Rationale: The health, fitness, recreation and sports industry is continuing to grow rapidly. The strength training and conditioning course is designed for students who have an interest in the fitness fields and the desire to expand their knowledge in the areas of exercise prescription. Students completing the course would have the necessary background in order to pursue a career as a fitness trainer, physical education instructor and coach. This course will also provide some insight into the physical and occupational therapist fields as it will use common therapy training principles, such as the FITT formula, overload and specificity.

HEALTH AND PHYSICAL EDUCATION ELECTIVES

CARE AND PREVENTION OF ATHLETIC INJURIES

CREDITS: 5

Full Year

Prerequisite: Biology

Grades: 10-12

Note: Course must be taken concurrently with appropriate grade-level physical education and health course.

Care and Prevention of Athletic Injuries is a year-long elective class taken in addition to the mandatory Health and Physical Education requirement. Students are exposed to basic First Aid techniques and the Emergency Medical System. Students learn basic rehabilitation techniques involved in caring for and preventing further athletic injury. Students receive an introduction to Kinesiology, Biomechanics, Anatomy and Physiology. Lab work centers on basic taping and strapping techniques of the ankle, knee, hip, elbow, wrist, finger and thumb.

FALCON P.A.L.S (Peer Assisted Learning Socialization)- Unified Physical Education

Grade: 12

CREDITS: 5

Full Year – a PE elective course that will fulfill the HPE requirement.

Students who take Falcon PALS Unified P.E. will take one marking period of Health

Course Prerequisites:

- Grade of 85 or better in Physical Education
- complete resume
- interview process
- Faculty review

This course would benefit students who:

- Are interested in various professions varying from teaching, social work, psychology, fitness, and the medical field.
- Are interested in taking a unique Physical Education course that encourages acceptance, respect for differences, and friendships.

Course Description: This course affords general population 12th grade students the opportunity to work with students with intellectual/multiple disabilities within a physical education setting. Accommodations, modifications and strategies are used to provide effective instruction in functional and developmentally appropriate skills within the least restrictive environment. Unified Physical Education encourages teamwork, fair play, sportsmanship, integrity, positivity and leadership to be spread throughout the Monroe Township Community.

Topics will include:

- An emphasis on sportsmanship and teamwork will be implemented throughout the course.
- Students will engage in communication activities in class and will have the opportunity to use the iPad and other forms of media to make presentations.
- PAL partners will work alongside of adaptive students to engage in socialization skills
- Throughout the course, students will work on the development of cardiovascular, muscular strength/endurance, balance, and flexibility.
- Students will work on the development of kinesthetic awareness
- Various skill sets and how to combine skills for fluid transfer in a game-like situations will be implemented

Course Rationale:

At MTHS we believe that each individual has an ability and desire to move, to be active and have fun. Movement is a necessary component of a healthy lifestyle. Physical Education, by nature provides an atmosphere where students can step outside of the confinements of a classroom and enjoy the benefits of movement and exercise while enjoying the social experience of interacting and communicating with classmates. Falcon PALS affords all of our students the opportunity to enjoy the social aspects as well as the physical aspects of Physical Education class.

COMMUNITY BASED FITNESS “CBF”

Grade 12

Senior option/early out students – internship/community service

- **Prerequisites:**

- Must have early out/senior option preferably on both days.
- Students who take “CBF” must fulfill all of the following requirements:
 - Complete an application
 - Successfully complete a faculty review
 - Be interviewed.
- 85 or better in Junior Health and Physical Education.

- **Course Description**

Community Based Fitness is a very unique program offered only at Monroe Township High School

- Offered to Senior students who have “early out” or senior option students work alongside of our 18-21 year old population with intellectual disabilities.
- The program is run on Tuesdays and Thursdays from 12:00 pm -2:00 pm.
- Senior students will receive credit for an internship if they have previously taken the senior option course.
- Seniors who have not taken senior option class previously may still take the course and receive volunteer hours.

- **Activities/Topics**

- Community Based Fitness is designed to afford all students the opportunity to experience health and fitness opportunities offered to adults in a community setting.
- Students visit various public community establishments to engage in fitness activities that promote lifetime fitness.
- Activities include:
 - Golf
 - Fishing
 - Disc Golf
 - Yoga
 - Strength training
 - Pickleball
 - Tennis
 - Hiking
 - Engage in Adult fitness/sport specific classes
 - Boxing
- Circuit training
- Zumba
- Golf lessons
- Yoga
- “CBF” are the “Core team leaders”
 - Peer leader ambassadors for the unified program in the Monroe Township Community
 - All Students involved in “CBF” will visit four Monroe Township elementary schools and MTMS throughout the year on Tuesdays

- Lead younger students with and with/out intellectual disabilities in Unified Activities.
- Facilitate activities that encourage inclusion and acceptance on the lower levels and throughout the Monroe Township Community.
- Involvement in various activities throughout the year that encourage respect, inclusion and acceptance in the Community.

TEEN PEP

CREDITS: 5

Full Year

Prerequisite: Students must fill out the application for the Teen PEP Program in March during the junior year of High School. Students must submit a resume. Students will be interviewed and go through a faculty review process. Students who meet all required standards are selected to be members of the Teen Pep class for their senior year.

Grade: 12

Requisite: Taken in addition to the health and physical education requirement. Selected students enroll in a school-based peer education course designed to increase knowledge, skills and behaviors that promote sexual health among adolescents.

Workshop topics:

Postponing Sexual Involvement, Pregnancy Prevention, HIV/AIDS Prevention, STI Prevention, Parent –Teen Communication, Sexual Harassment, Date Rape, Dating Violence, Homophobia Reduction, Puberty Education, Other Sexual Concerns

Students are required to attend a two day overnight retreat during the summer. Students must also participate in a community outreach.

SCIENCE

The Science Department offers a variety of inquiry-based courses to not only satisfy the Science graduation requirements but also address the National Next Generation Science Standards and the New Jersey Student Learning Standards. It is also our mission to provide the necessary skills for 21st Century College and career Readiness success. The District requirement for Science includes one year of Biology, one year of Chemistry and one year of Physics. Other courses are electives and do not satisfy our three year Science graduation requirement. It is recommended that placement or choice into any sequence takes into consideration the ability and interests of the student, future goals, teacher recommendation, and performance in previous science and mathematics courses. Students who seek a rigorous program of study with exceptional science ability and who wish to study science in greater depth should consider taking Honors and Advanced Placement courses.

Courses for advancement purposes in an approved college program or in a state approved 120 hour program must have the prior written approval of the high school principal, the K-12 Supervisor and the Director of Guidance. Students must also show evidence of a grade of C or better in the course and must receive a grade of 80 or better on the prescribed high school science department Honors level final examination in order to advance to the next level. Courses for advancement purposes do not receive high school credit nor do they receive credit toward the calculation of rank in class or the GPA.

Below is a template which lists the required course in each academic year.

Monroe Science Program 2021-2022

Grade					
6			Physical Science		
7			Earth Science and Space Science		
8			Life Science		
9	AP Biology	Biology			Honors Biology
10	AP Chemistry	Chemistry			Honors Chemistry
11	Applied Physics	Physics			Honors Physics and Physics I AP Physics 1,2 & "C"
12	Elective	Elective			Elective

Electives:

- Introduction to Ecology and Environmental Science, Honors Anatomy and Physiology, Advanced Placement Environmental Science, Advanced Placement Biology, Advanced Placement Chemistry, Advanced Placement Physics, Physics I, Scientific Research Development Course, Introduction to Forensic Science, Introduction to Forensic Science

Online, Biotechnology Concepts, Astronomy, Aerospace, Introduction to Engineering and Applied Science and Thermodynamics and Equilibrium Chemistry, Scientific Research and Development Rutgers University Waksman and Scientific Research and Development STEM Capstone.

REQUIRED COURSES:

APPLIED PHYSICS

CREDITS: 5

Full Year

Prerequisite: Chemistry

Grade: 11

Applied Physics explores the interactions between matter and energy. Topics covered in this course include motion, forces, energy, and momentum. The concepts are presented through experiments, demonstrations, and theories which lead to mathematical application through problem solving using basic algebraic skills. Organizational skills and study skills are emphasized in this course. A digital portfolio of learning activities and projects is maintained throughout the course.

BIOLOGY

CREDITS: 5

Full Year

Prerequisite: None

Grade: 9

This inquiry-based course examines both plant and animal life. Major thematic units include classification of organisms, biochemistry, biological systems, theories on the origin of life and genetics. S.T.E.M. concepts are developed through inquiry-based laboratory experiments that emphasize group process, classroom discussions, and cooperative projects.

CHEMISTRY

CREDITS: 5

Full Year

Prerequisite: Lab Biology

Grade: 10

Chemistry is the study of matter and energy approached from the viewpoint of the materials and substances found in nature and in the laboratory. Measurement, compounds and elements, atomic structure, chemical bonding, kinetic theory, kinetics and equilibrium, chemical energy and reactions are the unifying concepts used to develop the course. Students will study the principles of chemistry, develop problem solving skills, and will engage in data analysis through real life topics presented.

PHYSICS

CREDITS: 5

Full Year

Prerequisite: Student must have taken or be enrolled concurrently in Algebra II and have completed Lab Biology and Lab Chemistry Students currently enrolled in the Dynamics Math Program will be recommended for this course on a case-by-case basis.

Grade: 11

Physics is the inquiry-based study of the interactions between matter and energy. Topics covered in this course include motion, forces, energy, momentum, and electricity. The concepts are presented through experiments, demonstrations, and theories which lead to mathematical application through problem solving using intermediate algebraic skills.

HONORS BIOLOGY

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Full Year

Prerequisite: It is recommended that students have a grade of 90 or better in 8th grade science and teacher recommendation.

Grade: 9

This challenging course examines the major ideas and laboratory experiments explored in Laboratory Biology. Rigorous emphasis is placed on laboratory inquiry and research skills. Students can expect an average of up to a full hour of homework each day.

HONORS CHEMISTRY

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Full Year

Prerequisite: It is recommended that students have a grade of 80 or better in Honors Biology and have taken or be currently enrolled in Algebra I before selecting this course.

Grade: 10

Honors Chemistry is a physical science that explores the structure and composition of materials and changes in the composition of these materials. Emphasis is placed on the mathematical relationships involved in chemical reactions. Topics include measurement, compounds and elements, atomic structure, chemical bonding, kinetic theory, kinetics, equilibrium, thermodynamics, chemical energy and reactions. The topics are examined in greater depth and the inquiry approach is stressed to a larger extent than in the laboratory chemistry course. Students in this program should have strong algebra and problem-solving skills.

HONORS PHYSICS

CREDITS: 5

Full Year

(This course receives honors weighting for the calculation of the GPA.)

Prerequisite: It is recommended that students have a grade of 80 or better in Honors Chemistry and have taken or be concurrently enrolled in Honors Algebra II before selecting this course.

Grade: 11

Honors Physics follows the same outline of topics as Laboratory Physics however it covers the material at a more rapid pace and in more depth than Laboratory Physics. The subject matter is presented with more rigor, on a higher level, and is geared to produce a more detailed understanding of the physical laws that govern the universe. Critical thinking and advanced algebraic skills and trigonometric skills are necessary to apply S.T.E.M. concepts during experimentation and problem solving.

SCIENCE ELECTIVES

INTRODUCTION TO ECOLOGY AND ENVIRONMENTAL SCIENCE

CREDITS: 5

Full Year

Prerequisite: None

Grades: 10-12

Introduction to Ecology is an elective course designed for students who are concerned for their health and the environment. Basic concepts relating to human civilization and its effects on the environment are discussed. Subject matter includes the study of ecosystems, food chains, food webs, laws of limiting factors, identification of forest communities, lifecycles, recycling in the community, maximum load population, water, air, and solid waste pollution. Lab investigations include recognizing and identifying food chains or food webs in a local nature area, establishment of local recycling headquarters for the community, field trips, exploration of green technology including growing walls, analysis and costs of remediation, and analytical techniques for the testing of air, soil, water and pollutants.

HONORS ANATOMY AND PHYSIOLOGY

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Full Year

Prerequisite: Honors Biology and Honors Chemistry

Grades: 11-12

This is an elective honors level second year biology course that uses the systemic approach to study the structure and function of the human body. A strong emphasis is placed on understanding the physiological processes at the molecular level. Laboratory activities include advanced microscopy, advanced dissection, and measuring physiological functions using probes and computers. This is an excellent course for students planning a career in the health care industry.

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

CREDITS: 5

(This course receives advanced placement weighting for the calculation of GPA.)

Full Year

Prerequisite: Honors Biology with a grade of 80 or better and have taken and/or are currently enrolled in Honors Chemistry.

Grades: 10-12

This course will meet every other day throughout the school year in preparation for the AP examination. The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. It is intended to enable students to undertake a more advanced and rigorous approach to the topics of study. The goal of the AP Environmental Science course is to provide students with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and man-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Considerable emphasis is placed on field investigations as well as on laboratory study. Students will practice techniques for ecosystem monitoring.

ADVANCED PLACEMENT BIOLOGY

CREDITS: 10

(This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisite: It is recommended that students have completed an Honors Biology course prior to entry into AP Biology. Please note that incoming Freshman who would like to take AP Biology must meet the requirements set forth in the departmental advancement rubric.

Grades: 9-12

This course will meet everyday throughout the school year in preparation for the AP examination. Advanced Placement Biology is designed for the student who plans to continue their education in the life science field. This is a rigorous, inquiry based S.T.E.M. course is equivalent to a college level biology course. The curriculum will emphasize independent thinking skills in the areas of the Molecules and Cells, Heredity and Evolution and Organisms and Populations. Topics include chemistry of life, cells and cellular energies, heredity, molecular genetics, evolutionary biology, diversity of organisms, structure and functions of plants and animals and ecology.

ADVANCED PLACEMENT CHEMISTRY

CREDITS: 10 (This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisite: It is recommended that students have completed an Honors Chemistry course prior to entry into AP Chemistry. Please note that Sophomores who wish to take AP Chemistry must perform proficiently on a departmentally designed aptitude assessment.

Grades: 10-12

This course will meet everyday throughout the school year. Advanced Placement Chemistry is designed for the student who intends to pursue a career in the sciences. The course is designed to provide the stimulating S.T.E.M. challenge of college-level study, improve the quality of education and facilitate the student's transition from secondary school to college. The course will emphasize college material in the areas of Structure and States of Matter, Reactions and Descriptive Chemistry. Topics include atomic structure, chemical bonding, nuclear chemistry, solids, liquids, gases and solutions, types of chemical reactions, stoichiometry, equilibrium, kinetics, thermodynamics and organic chemistry.

ADVANCED PLACEMENT PHYSICS 1

CREDITS: 5 (This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisite: Completion of Honors Chemistry and concurrent enrollment in Honors Pre-Calculus. It is recommended that students have a grade of 85 or better in Honors Chemistry and an 85 in Honors Algebra II before selecting this course.

Grade: 10 & 12

This course will meet every other day throughout the school year.

Advanced Placement Physics 1 is designed for the student who intends to pursue a career in the sciences. This mathematically rigorous course is designed to provide the stimulating S.T.E.M. challenge of college-level study and will emphasize problem-solving and critical analysis of everyday physical phenomena. The course will cover Newtonian Mechanics (Kinematics, Newton's laws of motion, Work, Energy and Power, Circular motion, Oscillations, Gravitation and Rotational dynamics), Wave phenomena, Sound and Electrical Circuitry.

ADVANCED PLACEMENT PHYSICS 2

CREDITS: 5 (This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisite: Completion of Honors Physics or AP Physics 1 and completion of Honors Pre-Calculus. It is recommended that students have a grade of 85 or better in Honors Physics or AP Physics 1 before selecting this course.

Grade: 12

This course will meet every other day throughout the school year.

Advanced Placement Physics 2 is designed for the student who intends to pursue a career in the sciences. This mathematically rigorous course is designed to provide the stimulating S.T.E.M. challenge of college level study and will emphasize problem solving and critical analysis of everyday physical phenomena. The course will cover Electrostatics, Electro-magnetism, Advanced circuits, Waves and optics, Fluid mechanics, Thermal Physics, and Modern Physics.

ADVANCED PLACEMENT PHYSICS C

CREDITS: 10 (This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisite: Honors Physics or AP Physics 1 and **mandatory** completion or concurrent enrollment in AP Calculus AB, AP Calculus AB/BC, or AP Calculus BC. There will be **no exceptions** made to the AP Calculus prerequisite, since it is essential that students be proficient in Calculus in order to be successful in this course. It is recommended that students have a grade of 85 or better in Honors Physics or AP Physics 1 before selecting this course.

Grade: 12

This course will meet every day throughout the school year.

Advanced Placement Physics C is an intense and mathematically rigorous course designed for the student who intends to pursue a career in the sciences or engineering. This fast paced S.T.E.M. course utilizes the mathematical techniques of Calculus extensively. The course is designed to provide the stimulating challenge of college level study and is equivalent to two semesters of Calculus-based University Physics. The course will emphasize content covered in AP Physics C Mechanics and AP Physics C Electricity and Magnetism. Topics in Mechanics include kinematics, Newton's laws of motion, work, energy and power, circular motion, oscillations and gravitation and rotational dynamics.

Topics in Electricity and Magnetism include electrostatics, circuits, electromagnetism, and Maxwell's equations.

MOLECULAR BIOLOGY RESEARCH at THE WAKSMAN INSTITUTE AT RUTGERS UNIVERSITY HONORS

Full Year

Prerequisite: None

Grades: 11-12

This course is taught in conjunction with the Waksman Institute at Rutgers University as part of the Waksman Student Scholars Program. This program provides opportunities for students to conduct an authentic research project in molecular biology and bioinformatics and publish their findings. In the course of these studies, students, teachers, and research scientists work together on a genuine research problem. By actually doing science, students gain an understanding of how science operates and are encouraged to continue their education and careers in a science discipline. As part of this class, students will be required to attend at least 2 evening meetings on Rutgers University

Busch Campus. Successful completion of AP Biology is strongly recommended for enrollment in this course. Additional information about the WSSP can be found at <https://wssp.rutgers.edu/>

HONORS SCIENTIFIC RESEARCH AND DEVELOPMENT STEM CAPSTONE

Full Year

CREDITS: 5

Prerequisite: None

Grades: 12

The Research Development STEM Capstone course is a year-long project-based course focusing on developing and improving student research-skills. The course is aimed at AP-Chemistry, AP-Biology, AP-Physics and AP-Mathematics (Calculus or Statistics) students and emphasizes experimental technique training, statistically based experimental-design methods, mathematical analysis of experimental results, process modeling and visits to industrial and academic research organizations. An Internship component will be pursued.

HALF-YEAR ELECTIVES

INTRODUCTION TO FORENSIC SCIENCE

CREDITS: 2.5

Half Year

Prerequisite: None

Grades: 10-12

Forensics is a semester course that provides students the opportunity to explore the application of science to the criminal justice system. Students will analyze the history and development of forensic science. This hands-on course directs students in the scientific method, the collection, analysis and presentation of evidence and the processing of crime scenes.

BIOTECHNOLOGY CONCEPTS

CREDITS: 2.5

Half Year

Prerequisite: None

Grades:
10-12

Biotechnology Concepts is an intensive half-year course designed for those students interested in pursuing a science degree in college or with an interest in modern biological research techniques. Topics to be covered include DNA manipulation techniques (such as restriction enzyme digestion, polymerase chain reaction, gene cloning and DNA sequencing), bioremediation, agricultural biotechnology, organism cloning, and medical applications of biotechnology (such as stem cells, gene therapy and therapeutic cloning). This is a hands-on course. Emphasis will be placed on performing the laboratory techniques discussed in class.

ASTRONOMY

CREDITS: 2.5

Half Year

Prerequisite: None

Grades: 10-12

Astronomy is a semester course that provides students the opportunity to explore the conceptual theory and understandings of cosmology, the composition and structure of our Solar System and an examination of stars, black holes, galaxies and our Universe. Students will demonstrate their understanding through a variety of scenario-based learning experiences that have real-world applications. The study of astronomy includes the interdisciplinary application of mathematics taught in Algebra.

AEROSPACE

CREDITS: 2.5

Half Year

Prerequisite: NONE

Grades: 10-12

Aerospace is a semester course that offers a description of man's quest to reach the stars, from air flight to space flight. This course will immerse students into the investigation of gravity, conservation principles and motion, fluid and solid mechanics, energy and vehicle design, navigation, communication technology and space politics. Students will demonstrate their knowledge through a variety of hands-on, scenario-based problems that promote critical thinking. The study of aerospace includes the interdisciplinary application of Algebra, Physics and Engineering.

INTRODUCTION TO ENGINEERING AND APPLIED SCIENCE

CREDITS: 2.5

Half Year

Prerequisite: Algebra I

Grades: 10-12

Aspects of engineering and applied science will be examined primarily for students intending to pursue careers in Civil, Mechanical, Metallurgical & Mining, Electrical, Chemical, Computer or Environmental Engineering. While Science may be summarized as the careful pursuit and collection of answers explaining nature, Engineering may be thought of as the application of this knowledge for the betterment of human kind. While Scientists are primarily interested in the "correct" or "most likely" answer, Engineers are interested in the "most feasible" or "optimum" option, both from a scientific and practical viewpoint. Students will be presented with relevant history and development as well as critical aspects of the discipline. An inquiry –based applied problem –solving approach will support understanding of engineering fundamentals.

THERMODYNAMICS AND EQUILIBRIUM CHEMISTRY

CREDITS: 2.5

Half Year

Prerequisite: Honors Chemistry

Grades: 10-12

Thermodynamics and Equilibrium Chemistry is a one semester laboratory course designed for students interested in taking Advanced Placement Chemistry or those preparing to take the SAT II Chemistry subject test. Enrollment in Thermodynamics and Equilibrium Chemistry requires that students have a strong foundational knowledge from Honors Chemistry, as this course will build on those topics. Conceptual themes including acid/base reactions, equilibrium & reaction rates, electrochemistry, thermodynamics, organic chemistry, and descriptive chemistry will provide a rich framework for course exploration. Laboratory experiences will promote the practical application of these concepts. Students will acquire a greater facility in analytical and critical thinking, a firm foundation on which to build further scientific studies and a better understanding of the role of chemistry in today's world.

SOCIAL STUDIES

REQUIRED COURSES

The vision of the Monroe Township High School Social Studies Department is to encourage the growth of citizenship in our democracy. It is the responsibility of this department to create, support, implement and evaluate a rigorous social studies curriculum with the strategies and activities that engage students with significant ideas, and encourages them to connect what they are learning to prior knowledge and current issues, to think creatively and critically about what they are learning, and apply that learning to authentic situations.

Social Studies, as defined by the National Council for the Social Studies, is “the integrated study of the social sciences and humanities to promote civic competence.” The primary purpose of the Monroe Township Public Schools Social Studies program is to provide an academically rigorous environment that produces active critical thinkers and productive, civically competent, participants in our society. Students are given the opportunity to develop their own sense of place in our community, state, nation and global village. Students will pursue individual goals and challenges as they develop an understanding of self, the diverse community of which they are a part, and their connection to the goals and interests of the global community and planet earth. The ideal of a *common good* will be discovered by students through scholarship, artisanship, leadership and citizenship.

Students will study history, citizenship/political science, geography, economics, anthropology, sociology, and the humanities as prescribed by the New Jersey State Student Learning Standards for Social Studies (NJSLSS). As they study the human condition in these contexts, they will gain an understanding of their own country’s history, institutions and environment. They will also apply their knowledge to understand the forces that have shaped world cultures. Students will learn to view contemporary problems facing the nation and the world as products of complex historical, institutional, and environmental processes. Students will discover their own individuality and the contributions they can make to society. They will know what they should strive to become and their role as responsible and productive individuals who possess civic competence.

WORLD HISTORY

CREDITS: 5

Full Year

Prerequisite: None

Grade: 9

What problems have bothered humankind over time? How did we get to where we are today? Are warfare, violence, and terrorism inevitable? Where are we going? World History presents a panorama of people and their development. It is designed to acquaint students with pertinent world events that will further enhance their global perspective and enable them to see human development in a different light. Teachers utilize a variety of teaching techniques and instructional materials that enable the student to analyze the broad, historical forces that are at work shaping the world of the twenty-first century. The last segment of the course is devoted to a study of twentieth century issues and contemporary global issues. In addition, the responsibilities of world citizenship are studied, as well as basic geographic concepts of various world regions.

Themes such as human rights, religions, violence in society, global conflict and cooperation, the "ism's" that have shaped our contemporary world, interdependence, world culture regions, characteristics of a culture, cultural diversity, environmental concerns, relationship between geography and society, and the role of the arts in human development will be studied along with other issues mandated by student interest and/or current media coverage. This course fulfills the first year of the three-year State requirement in social studies for graduation and incorporates the New Jersey State Student Learning Standards for Social Studies (NJSL:SS) within the framework of the course.

U.S. HISTORY I

CREDITS: 5

Full Year

Prerequisite: None

Grade: 10

U.S. History I The United States History program is designed to ensure students of varying abilities an opportunity to master the content and skills of this discipline. We must convey the vast range of events and achievements that make up contemporary life to our students. Their ability to access the events and achievements of the past directly affects their ability to participate and function effectively in society. The course is structured in such a manner as to provide the student with a variety of activities that will enable him/her to understand and appreciate the history of the American people as a part of the overall human experience. It is important that students use this understanding and appreciation to further their personal goals and, through active citizenship, become effective, active members of society. The US History I course provides a chronological survey of the major themes in American History beginning with the examination of the United States Constitution up to and including the United States involvement in World War I. Topics and themes will focus on the documents and the events that have shaped our history and how this legacy influences our society today. This course fulfills the second year of the social studies requirement for graduation and infuses the New Jersey State Student Learning Standards for Social Studies (NJSL:SS).

U.S. HISTORY II

CREDITS: 5

Full Year

Prerequisite: None

Grade: 11

U.S. History II concentrates on developments in the U.S. in the twentieth century. The emphasis will be on the profound technological, political, and social transformations that have altered our society. Topics such as two world wars; a severe depression; two other more localized wars; the American family; struggle toward equality for all of our citizens; determinants of domestic and foreign policy; and the analysis of our economy are focal points of the study. Along with the emphasis on U.S. History, there will be segments highlighting these developments within New Jersey, and the role New Jersey played in the development of the United States. Course content will also include current events and global issues with their historical perspectives. As a result, students analyze and discuss current happenings that are reported in the media and their impact on society. This course fulfills the third year of the social studies requirement for graduation and infuses the New Jersey State Student Learning Standards for Social Studies (NJSL:SS).

SOCIAL STUDIES ELECTIVES

HONORS WORLD STUDIES

CREDITS: 5

(This course receives honors weighting for calculation of the GPA.)

Full Year

Prerequisite: Performance in 8th grade social studies and language arts with a minimum average of 90.

Grade: 9

World Studies presents students with a unique opportunity to explore interdisciplinary study through the integration of historical topics/concepts with literature and art prevalent of and/or set in the time period. Through this integration, students will actively participate in and collaborate on thematic projects, providing them with a holistic view of a variety of cultural, artistic, and literary movements. The course, then, is a multi-faceted approach to learning that enables students to piece together historical movements, literature, and art in a hands-on, engaging, manner. These studies will also encompass a strong emphasis on verbal SAT and writing skills as they relate to the various historical, economic, political, and social movements of the day. Honors level courses use an enhanced discussion, a variety of supplemental readings, expanded writing tasks and incorporates research-based homework on a regular basis. Students taking this course will satisfy the World History graduation requirement.

HONORS WORLD HISTORY

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Prerequisite: Performance in 8th grade social studies and language arts with a minimum average of 90.

Grade: 9

The Honors Program follows the same content outline as the required World History courses. It is designed for the student who will thrive in a rigorous academic environment. It is expected that students enrolled in this challenging course can work for a sustained period of time immersed in the analysis, synthesis and evaluation of content materials. Students are required to read and interpret primary and secondary historical sources, will be required to develop, to defend, and to debate a position through the use of verbal presentations supported by expanded research and homework assignments. Students taking this course will satisfy the World History graduation requirement.

HONORS AMERICAN STUDIES I

CREDITS: 5

(This course receives honors weighting for calculation of the GPA.)

Full Year

Prerequisite: Performance in the 9th grade World Studies, Honors World History or Honors LA I with a minimum average of 85.

Grade: 10

American Studies I presents students with an opportunity to explore an innovative, interdisciplinary study, linking topics from eighteenth and nineteenth century U.S. History with literature indicative of the time period. This course is taught thematically, enabling students to make meaningful

connections. Students are exposed to the same objectives taught in the traditional classes, yet course content is presented through a team-teaching, integrated approach. Throughout the course students gain insight as to why writers of various historical time periods wrote about specific subject matter and utilized particular styles as they study forces and movements in history. Students taking this course will satisfy their U.S. History I graduation requirement. Projects, readings, and activities are demanding, yet the course is designed for students who thrive in a creative, academic environment. Completion of a research paper is an integral component of this course.

HONORS AMERICAN STUDIES II

CREDITS: 5 (This course receives honors weighting for calculation of the GPA.)

Full Year

Prerequisite: Performance in the 10th grade American Studies, with a minimum average of 85

Grade: 11

American Studies II presents students with an opportunity to explore an innovative, interdisciplinary study, linking historical developments in the U.S. during the twentieth century with literature written during the time period. As with American Studies I, the course encompasses a double period of time and is taught thematically, enabling students to make meaningful connections. Students are exposed to the same objectives taught in the traditional classes, yet course content is presented through a team-teaching, integrated approach. Students taking this course will satisfy their U.S. History II graduation requirement. Projects, readings, and activities are demanding, yet the course is designed for students who thrive in a creative, academic environment. Completion of a research paper is an integral component of this course. Students taking this course will satisfy the US II History graduation requirement.

HONORS U.S. HISTORY I

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Full Year

Prerequisite: Performance in World History Honors and Honors Language Arts with a minimum average of 85. Students moving from standard level classes will need a 90 average.

Grade: 10

The Honors Program follows the same content outline as the required U.S. History courses. It is designed for the student who will thrive in a rigorous academic environment. Honors level courses use enhanced discussion, a variety of supplemental readings, and expanded writing tasks. Students taking this course will satisfy the US I History graduation requirement.

HONORS U.S. HISTORY II

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Full Year

Prerequisite: US I Honors or US I Advanced and Honors Language Arts with a minimum average of 85. Students moving from standard level classes will need a 90 average.

Grade: 11

The Honors Program follows the same content outline as the required U.S. History courses. It is designed for the student who will thrive in a rigorous academic environment. Honors level courses use enhanced discussion, a variety of supplemental readings, and expanded writing tasks. Students taking this course will satisfy the US II History graduation requirement.

ADVANCED PLACEMENT U.S. HISTORY I

(This course receives advanced placement weighting for the calculation of the GPA.)

(Colonial to 1900)

CREDITS: 5

Full Year

Prerequisite: Performance in the 9th grade World Studies or World History Honors program and Honors Language Arts with a minimum average of 85. Students moving from standard level classes will need a 90 average.

Grade: 10

This course serves as a pre-requisite for the Advanced Placement U.S. History II currently offered in the 11th Grade. Advanced Placement United States History is a challenging course that is meant to be the equivalent of a freshman college course and can earn students college credit. It is a two year survey of American history from the migration of Native Americans across Beringia to the present time. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and analytical thinking skills, essay writing, and on interpretation of primary and secondary sources. Students taking this course will satisfy the US I History graduation requirement.

ADVANCED PLACEMENT US HISTORY II

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisite: Performance in the 10th grade American Studies, Honors US I or AP U.S.I and Honors Language Arts with a minimum average of 85. Students moving from standard level classes will need a 90 average.

Grade 11

U.S. History II Advanced Placement begins with a focus on the Gilded Age (1877-1896) and continues in-depth analysis to the modern era. The course is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in U.S. History. Students learn to analyze historical materials, their relevance to a given interpretive problem, their reliability, and their impact and to weigh the evidence and interpretations presented in historical scholarship. The course is equivalent to a college freshman course and can be used to satisfy the graduation requirement. The objective is to prepare students for the Advanced Placement Examination in May that is given by the College Board. Student success on this exam determines the credit and placement awarded by various colleges. A great deal of emphasis is placed on various interpretations of history, document analysis, essay writing, research, and reading various texts. The course is conducted in a seminar fashion and a great deal of responsibility is placed upon the student.

ADVANCED PLACEMENT EUROPEAN HISTORY

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Grade: 12

Prerequisite: Performance in the 11th grade American Studies, Honors US II or AP U.S. I and Honors Language Arts with a minimum average of 85. Students moving from standard level classes need a 90 average and teacher recommendation.

AP European History is intended for qualified students who wish to complete a class equivalent to a college introductory course in European history. This class corresponds to the most recent developments in history curricula at the undergraduate level. European history is seen in a broad perspective reflecting an awareness of other disciplines and diverse techniques of presentation, including visual and statistical materials. The study will encompass European history since 1450 and introduce students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which we live. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) and understanding of the principle themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

ADVANCED PLACEMENT HUMAN GEOGRAPHY

CREDITS: 5

Full Year

(This Course receives advanced placement weighting for the calculation of the GPA.)

Grade: 10- 12

Advanced Placement Human Geography is a rigorous yearlong course in geography that gives students the opportunity to earn college credit in geography while still in high school. The content of an AP Human Geography course helps students develop critical thinking skills through the understanding, application and analysis of the fundamental concepts of geography. Major themes that transcend the course of study at multiple levels of scale include globalization, diffusion, assimilation, acculturation, integration, and interaction. Through AP Human Geography, students are introduced to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students will employ spatial concepts and landscape analysis to analyze human social organization and its environmental consequences. Students will meet the five college-level goals as determined by the National Geographic Standards. They also learn the methods and tools geographers use in their science and practice.

ADVANCED PLACEMENT U.S. GOVERNMENT AND POLITICS

CREDITS: 5

Full Year

(This course receives advanced placement weighting for the calculation of the GPA.)

Prerequisite: Performance in the 10th and 11th grade American Studies, all US Honors or AP United States History II with a minimum average of 85.

Grade: 12

U.S. Government and Politics offers students an analytical perspective on government and politics in the U.S. Students also analyze the American Political System, its framework, and its traditions and values. Students examine the nature of the American Political System, its development over the past two hundred years, and how it functions today. The principle processes and institutions through which

the political systems work, as well as some of the public policies these institutions establish and how they are implemented are the focus of study. The following questions will be posed during this course: What is politics? What is power and how is it exercised? How have court decisions been instruments of social change? What are interest groups and how do they affect the political process?

This course is the equivalent to a college freshman course and can be used to satisfy the graduation requirement. A great deal of emphasis is placed on various interpretations of history, document analysis, essay writing, research, and reading various texts. This course is conducted in a seminar fashion and a great deal of responsibility is placed upon the student.

ADVANCED PLACEMENT PSYCHOLOGY

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA.)

Prerequisite: Successful completion of Honors World Studies, World History Honors, U.S. I or U.S. II Honors, U.S. I or U.S. II AP, or American Studies Honors with a grade of 85 or better.

Grades: 11-12

AP Psychology is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. Students who take AP Psychology are willing to accept the challenge of a rigorous curriculum. AP Psychology offers a course and exam to students who wish to complete studies equivalent to an introductory college course in psychology.

THE AFRICAN-AMERICAN EXPERIENCE

CREDITS: 5

Full Year

Prerequisite: None

Grades: 11-12

This course provides an overview of the lives of peoples of African descent in the United States from the Diaspora (slavery) to the present. Emphasis will be placed on the historical, social, political, economic, and cultural factors that have shaped these experiences and will examine the ways African-Americans have continued to articulate these experiences through literature, music, and the visual arts.

AMERICAN IMAGE ON FILM: FILM STUDY IN AMERICAN HISTORY/CULTURE

CREDITS: 2.5

Half Year

Prerequisite: None

Grades: 10-12

This course will focus on how the motion picture industry has conveyed the American image over time. Using films that reflect the issues of the day, students will discern how film mirrors issues such as social justice, traditional American values, and the complex and often contradictory social, political, scientific, and economic developments in American society. Not a history versus Hollywood course, but a course that will teach students how to read the film for evidence of the time in which it was made. This course will provide students with a diverse range of movies, which will enable them to become more analytical and precise when speaking and writing about film.

CIVIC ACTION IN A DEMOCRACY

CREDITS: 2.5

Full Year

Prerequisite: None

Grades: 10-12

This semester class will promote civic competence and responsibility by providing students with an innovative course of instruction on the history and principles of constitutional democracy in the United States. Critical thinking exercises, problem-solving activities, and cooperative learning techniques help develop intellectual and participatory skills which increase understanding of the institutions of American constitutional democracy.

THE HOLOCAUST AND GENOCIDE IN THE MODERN WORLD

CREDITS: 5

Full Year

Prerequisite: None

Grades: 11-12

This course will examine the phenomenon of mass murder and the concept of "genocide" through investigations of the Holocaust and at least two other genocidal events in modern world history. Topics include the role of the nation-state, the history of modern racism and nationalism, and the relationship of war and revolution to genocide.

PSYCHOLOGY

CREDITS: 5

Full Year

Prerequisite: None

Grades: 10-12

Psychology is the study of behavior and mental processes. This course is designed to give students the ability to relate an understanding of psychological concepts to their own growth and development. Knowledge of psychology will facilitate an understanding of human behavior in a complex society. Course content focuses on development, learning and cognition, and personality theories. The course provides a variety of affective and cognitive experiences, which will encourage open examination of psychological problems and issues.

SOCIOLOGY

CREDITS: 5

Full Year

Prerequisite: None

Grades: 11-12

Sociology is designed to introduce students to the sociological study of society which focuses on the systematic understanding of social interaction, organization, institutions, and change. Major themes in sociological thinking include the interplay between the individual and society, how society is both stable and changing, the causes and consequences of social inequality, and the social construction of life. Students will study the social world and gain insights into topics such as culture, socialization, delinquency, poverty, racism, sexism, classism, and more! By making vivid the social basis of everyday life, sociology also develops critical thinking by revealing the social structures and processes that shape diverse forms of human life. The course is designed with a heavy emphasis on class discussion and participation.

INTRODUCTION TO US LAW

CREDITS: 5

Full year

Prerequisite: None

Grades: 11-12

This course is designed to give students the opportunity to explore the structure, power and purpose of the American legal system and government. Throughout this course students will better understand the intricacies of our three branches of government, the inner workings of the legal system, as well as the structure of our law enforcement and penal system. The goal of this course is to help students be informed citizens by allowing them to evaluate the powers of government and law, how to interpret law and the way power, rights and constitutional interpretations influence the law. Students will have the opportunity to explore if they are interested in the federal/local government, local law enforcement and legal system as potential career paths or courses of study in the future. Some highlights of the course involve mock trials, creating new governments from scratch, evaluating Presidents, writing letters to legislators, interviewing court officials and debates/discussions about the constitutionality of many laws as well as analysis on major Supreme Court rulings.

VISUAL ARTS

The Visual Arts Department is designed for students who are interested in the arts. Classes are designed to work in sequence to include entry level classes in Drawing, Painting, Ceramics, Sculpture, and Graphic Design. The more advanced art students can develop their artistic talents by participating in a variety of higher-level art courses.

STUDIO ART I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

This course is an introductory, required course, for all students who choose to pursue a visual arts program. In this introductory class the students will explore the basic skills and the elements of art with emphasis on drawing, color, and painting techniques. In addition, the student will experiment using a variety of art materials. The Elements of Design will be discussed in depth. Students will also be exposed to a variety of mediums and forms of art such as 2-D, 3-D, and digital medium.

STUDIO ART II

CREDITS: 5

Full Year

Prerequisite: Studio Art I

Grades: 10-12

This class is an intermediate level course that will focus on drawing, painting, and design techniques. The course will stress student experimentation in multiple 2-dimensional areas; to include color theory, figure drawing, rendering textures, and dynamic compositional layouts. Students will continue to develop their skills with various mediums, such as graphite, charcoal, pastel, pen, ink, watercolor, gouache, and acrylic paint. Knowledge of The Elements of Design is expected. The Principles of Design and various artists and movements in art history will be studied in depth.

STUDIO ART III

CREDITS: 5

Full Year

Prerequisite: Studio Art II

Grades: 11-12

This course is designed for the serious art student who intends to further his / her education in the visual arts field. Study of career options in the visual arts field will be explored. Students will work with various mediums and techniques including acrylic painting, stretching canvas, and matting their own artwork for presentation. In addition, students will be responsible for keeping a sketchbook / journal, developing and refining their portfolios, visiting art museums and galleries, and helping set up visual art displays. The critique process will also play a major role and will be practiced in the form of class discussions and written essays. Connections to art history will be made throughout the year and serve as inspiration for projects. Students will be expected to dedicate themselves to learning and creating art. With assistance from the instructor, students will prepare applications and assemble an art portfolio for employment, college or art school admission.

CERAMICS & SCULPTURE I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9 -12

This class will focus on the beginning levels of 3-D design. Students will apply and build upon their prior knowledge related to the Elements of Art and Principles of Design and relate them to three-dimensional works of art. Topics and skills covered include a focus on sculpture, ceramics, instillation, and other areas, while working with a wide variety of media such as clay, plaster, wire, and various other materials. Students will be introduced to 3-D modeling tools and techniques and will study essential technical concepts in building, texturing, and lighting three-dimensional forms. Additionally, the course integrates a study of art movements and various artists throughout the year.

CERAMICS & SCULPTURE II

CREDITS: 5

Full Year

Prerequisite: Ceramics & Sculpture I (3D)

Grades: 10-12

The Ceramics & Sculpture II course is offered to students who have successfully completed Ceramics & Sculpture I (3D Art I). This advanced-level course is designed for student who would like to build upon the methods and basic techniques learned in the beginning-level 3D courses. Students will explore more advanced techniques such as glaze application, different decorating options, and ceramic firing methods. Students will work on both hand-built projects in a variety of media and also on the potter's wheel, learning to perfect their skills and techniques. Advanced elements of design creativity, craftsmanship, and overall presentation will be emphasized, and increased critical thinking and presentation skills will be stressed. Individual and group critiques will be an important part of taking design skills to the next level, as well as developing a working knowledge of historical and contemporary artists.

GRAPHIC DESIGN I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

This Graphic Design course focuses on visual communication, theory, layout, elements and principles of design, and heavily emphasizes a hands-on computer design experience for the beginning designer. Professional Graphic Design software will be explored, including Adobe Photoshop, Adobe Illustrator, and Adobe InDesign. The students will be exposed to the rapidly changing methods and techniques used in the Graphic Design workplace. Digital Photographs will be applied to layouts and the internet will be utilized. Design problems will require students to develop end products that reflect contemporary Graphic Design and utilize career skills that are in the field. Projects included are CD covers, brochures, logo designs, business cards, letterheads, magazine advertisements and magazine covers. Students will create digital portfolios of their work for real world job preparation.

GRAPHIC DESIGN II

CREDITS: 5

Full Year

Prerequisite: Graphic Design I

Grades: 10-12

The advanced designer will continue to explore and enhance skills developed in Graphic Design I. The students will strive to take the foundations and elements previously learned and create their own original and unique style. Students will use professional Graphic Design software such as Adobe Photoshop, Adobe Illustrator and Adobe InDesign to master the art of visually communicating through detailed layouts. Students will create digital portfolios of their work for real world job preparation.

GRAPHIC DESIGN III

CREDITS: 5

Full Year

Prerequisite: Graphic Design I & II

Grades: 11-12

Graphic Design III will utilize the skills developed from the previous Graphic Design levels and enhance them through real-world assignments. Students will use the Adobe Suite to produce designs that attract greater attention over competitor brands, update designs for the modern world, create designs where the meaning is quickly portrayed to the consumer, and construct designs that can be recognizable on everything from clothing to sports jerseys to websites. The student will also be able to design individually selected projects while working with a strict client deadline, similar to the way the graphic design industry works. Comprehensive presentations will make the student aware of what are weak and what effective methods of designing are. The student will be able to accomplish advanced graphic design techniques and projects by the end of the year.

ADVANCED PLACEMENT STUDIO ART

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisites: Studio II

Grade: 11-12

The Advanced Placement Studio Art course is designed for senior art students who are serious about their art and who are going to pursue a career in the visual arts field. This course is not based on a written examination but instead; students will submit a portfolio for evaluation at the end of the school year. There are two distinct portfolios a student can choose from, depending upon their expertise and advice from the instructor: the Drawing Portfolio and the Two-Dimensional Design Portfolio. The Advanced Placement Portfolio should be viewed as the culminating experience in a student's secondary visual arts training.

Each portfolio requires submission in three distinct sections. The sections are designed to assess different aspects of student performance. The sections require the student to demonstrate quality, breadth, and in-depth engagement in the process of making art. The three sections of each portfolio are:

*Section I: **Quality*** - the development of a sense of excellence in art;

*Section II: **Concentration*** - an in-depth commitment to a particular artistic concern;

*Section III: **Breadth***- a variety of experiences in the formal, technical, and expressive means available to an artist- AP Studio Art Teachers Guide

As a requirement of the portfolio, students will photograph all of their artwork in the form of color slides. In addition to the development of the AP Portfolio, the instructor will assist students in preparing college applications, financial aid forms, and assemble the portfolio for college or art school entrance interviews, or employment.

ADVANCED PLACEMENT 3-D STUDIO ART

Credits: 5

(This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisites:

3-D Art II

Grade:-11-12

The Advanced Placement 3-D Studio Art course is designed for senior art students who are serious about their art and who are going to pursue a career in the visual art field. This course is not based on a written examination, but instead; students will submit a portfolio for evaluation at the end of the school year. The Advanced Placement Portfolio should be viewed as the culminating experience in a student's secondary visual arts training.

Each portfolio requires submission in the three distinct sections. The sections are designed to assess different aspects of student performance. The sections require the student to demonstrate quality, breadth, and in-depth engagement in the process of making art. The three sections of the portfolio are:

*Section I: **Quality*** – the development of a sense of excellence in art;

*Section II: **Concentration*** – an in-depth commitment to a particular artistic concern;

Section III: Breadth – a variety of experiences in the formal, technical, and expressive means available to an artist – AP Studio Art Teachers Guide

As a requirement of the portfolio, students will photograph all of their artwork in the form of digital, color slides. In addition to the development of the AP Portfolio, the instructor will assist students in preparing college applications, financial aid forms, and assemble the portfolio for college, art school entrance interviews, or for employment.

ADVANCED PLACEMENT ART HISTORY

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA.)

Full Year

Prerequisite: None

Grades: 11-12

Advanced Placement Art History is a fast –paced, intensive course, designed to prepare the students to qualify for credit and advanced placement in many American colleges, and may be used to satisfy humanities or history college credit requirements. This course is based on a study of the visual arts (painting, sculpture, and architecture) produced by various world civilizations during the peaks of their artistic achievement. Students will gain an understanding of the role of all of the arts in the development of civilization. The student is provided with the necessary conceptual framework to be able to analyze and understand historical and contemporary art forms. Three field trips to view painting, sculpture, and architecture are required within the course of the year.

Prior experience in history is necessary for those who take the course, as this is not a studio art – based course. Students who have done well in other advanced academic studies, such as history, literature, or the humanities, students wishing to pursue art as a college major or minor are especially encouraged to enroll.

WORLD LANGUAGES

The Monroe Township Board of Education requires all students to take two years of a world language. Any student considering post-secondary education should take a minimum of two consecutive years of study in the same language. Students are encouraged to review college requirements as many colleges are now requiring a third consecutive year of the same language. All courses within the world languages department emphasize reading, writing, speaking, and listening skills. Teachers make every attempt to teach in the target language. Students who complete a four year sequence are encouraged to participate in the New Jersey Seal of Biliteracy.

LEVEL I (Spanish, French OR Italian)

CREDITS: 5

Full Year

Prerequisite: None

Grades 9-12

Level I is an introductory course aligned to the New Jersey Student Learning Standards and ACTFL Performance Level Descriptors. The course promotes target language acquisition in each domain of communication: reading, writing, speaking and listening. Students work toward the Novice-Mid proficiency level as they develop language and cultural awareness. By the end of the course students are able to greet, recite memorized phrases, utilize key vocabulary, ask and answer simple questions, and communicate basic information about themselves and their daily lives. Project-based learning is embedded within the curriculum so that students learn in authentic ways to use and produce language.

LEVEL II (Spanish, French OR Italian)

CREDITS: 5

Full Year

Prerequisite: Level I of the Language

Grades: 9-12

Level II is an introductory course aligned to the New Jersey Student Learning Standards and ACTFL Performance Level Descriptors. The course promotes target language acquisition in each domain of communication: reading, writing, speaking and listening. Students work toward the Novice-High proficiency level as they develop language and cultural awareness. By the end of the course students are able to describe their daily routines, narrate events in the past, engage in dialogues on a variety of familiar and unfamiliar topics. Project-based learning is embedded within the curriculum so that students learn in authentic ways to use and produce language.

LEVEL II HONORS (Spanish, French OR Italian)

CREDITS: 5

Full Year

Prerequisite: Level I of the Language, 90 or higher.

Grades: 9-12

Level II Honors is an introductory course aligned to the New Jersey Student Learning Standards and ACTFL Performance Level Descriptors. The course promotes target language acquisition in each domain of communication: reading, writing, speaking and listening. Students work toward the Novice-High proficiency level as they develop language skills and cultural awareness. Project-based learning is embedded within the curriculum so that students learn in authentic ways to use and produce language. Honors offers the highly motivated student of each language the opportunity to begin a sequence of rigorous studies of the target language and the cultures of the associated people groups.

LEVEL III (Spanish, French OR Italian)

CREDITS: 5

Full Year

Prerequisite: Level II of the Language

Grades: 10-12

Level III is an intermediate course aligned to the New Jersey Student Learning Standards and ACTFL Performance Level Descriptors. The course promotes target language acquisition in each domain of communication: reading, writing, speaking and listening. Students work toward the Intermediate-Low proficiency level as they develop language and cultural awareness. By the end of the course students are able to interact in social situations, understand, ask, and respond to a variety of questions, and understand written texts on familiar topics. Project-based learning is embedded within the curriculum so that students learn in authentic ways to use and produce language.

LEVEL III HONORS (Spanish, French OR Italian)

CREDITS: 5

Full Year

Prerequisite: Level II Honors;

Grades: 10-12

Level III Honors is an intermediate course aligned to the New Jersey Student Learning Standards and ACTFL Performance Level Descriptors. The course promotes target language acquisition in each domain of communication: reading, writing, speaking and listening. Students work toward the Intermediate-Low/Intermediate-Mid proficiency level as they develop language skills and cultural awareness. Project-based learning is embedded within the curriculum so that students learn in authentic ways to use and produce language. By the end of the course students are able to interact in social situations, understand, ask, and respond to a variety of questions, and understand written texts on familiar topics. Honors offers the highly motivated student of each language the opportunity to continue a sequence of rigorous studies of the target language and the cultures of the associated people groups.

LEVEL IV (Spanish, French OR Italian)

CREDITS: 5

Full Year

Prerequisite: Level III of the language

Grades: 11-12

Level IV is an advanced level elective course aligned to the New Jersey Student Learning Standards and ACTFL Performance Level Descriptors. The course promotes target language acquisition in each domain of communication: reading, writing, speaking and listening. Students work toward the Intermediate high - advanced low proficiency level as they develop language and cultural awareness. By the end of the course students are able to describe careers and identities, family and community, science and technology, beauty and aesthetics, and environmental challenges. Project-based learning is embedded within the curriculum so that students learn in authentic ways to use and produce language.

LEVEL IV HONORS (Spanish, French OR Italian)

CREDITS: 5

Full Year

Prerequisite: Level III Honors.

Grades: 11-12

Level IV Honors is an advanced-level elective course aligned to the New Jersey Student Learning Standards and ACTFL Performance Level Descriptors. The course promotes target language acquisition in each domain of communication: reading, writing, speaking and listening. Students work toward the Intermediate-

High/Advanced Low proficiency level as they develop language skills and cultural awareness. In addition, by the end of the course students will have explored the six AP themes in preparation for taking AP Language and Culture the following year: Global Challenges, Beauty and Aesthetics, Science and Technology, Personal and Public Identities, Contemporary Life, Families and Communities. Project-based learning is embedded within the curriculum so that students learn in authentic ways to use and produce language. Honors offers the highly motivated student of each language the opportunity to master the rigorous studies of the target language and the cultures of the associated people groups.

ADVANCED PLACEMENT – (Spanish, French OR Italian Language and Culture)

CREDITS: 5

(This course receives advanced placement weighting for the calculation of the GPA)

Full Year

Prerequisite: Level IV Honors

Grade: 12

AP is a weighted course that builds on the material learned in I, II, III and IV. Its primary goal is to expand on the development of fundamental proficiencies in the communication skills of speaking, reading, writing and listening. The students will practice these skills in meaningful and realistic situations and interactions. The intricacies of the language will be reviewed as well as more advanced grammar points. Students will be expected to comprehend actual periodical literature and discuss excerpts orally and in writing.

CONTEMPORARY ISSUES IN LATIN AMERICA

CREDITS: 5

Full Year

Prerequisite: Spanish IV or Native/Heritage Speaker

Grades: 10-12

Contemporary Issues in Latin America is an elective course aligned to the New Jersey Student Learning Standards and ACTFL Performance Level Descriptors. The course is taught in Spanish only, focusing on contemporary issues in Latin America and their impact on our world today. By understanding Latin American history, students will gain a perspective on current world issues including immigration, migration, social-political, and social-economic concerns. Students will examine events in today's news along with contemporary novelists such as Gabriel Garcia Marquez. This course is specifically designed for students who wish to continue their study of Spanish at an intermediate-high level of speaking. The course also prepares students for the Seal of Biliteracy Exam.

LATIN I

CREDITS: 5

Full Year

Prerequisite: None

Grades: 9-12

Students are introduced to the language, history, and culture of a great civilization. Through a study of the basic Latin grammatical structures, students will gain a better understanding of English grammar and vocabulary. These skills are beneficial as students prepare for the SAT. Students study Roman language and culture with a variety of materials. A reading-based approach is also used to engage students in Roman mythology, technology, civilization, and language. Latin I incorporates the NJSLs within its framework.

LATIN II

CREDITS: 5

Full Year

Prerequisite: Latin I

Grades: 10-12

Latin II is a continuation of level one and it is designed to give students further background in the language. New vocabulary and grammatical structures are studied as well as continuation of the themes of daily life in ancient civilizations. Students will be introduced to films, literary works, and articles that relate to this period of time and discover how current cultures are influenced by this time period. Students will continue to work on skills that assist with the language component of the SAT's. This course incorporates the NJSLs within its framework.

HONORS LATIN III

CREDITS: 5

(This course receives honors weighting for the calculation of the GPA.)

Full Year

Prerequisite: a grade of 90 in Latin II

Grades: 11-12

Honors Latin III provides an opportunity for students who have mastered level two to continue at an advanced level. The student will be introduced to complex syntax, advanced translation methods, and new vocabulary. This course focuses heavily on the reading and translation of authors and texts of the Late Roman Republic and Early Empire. In addition to translation, the student will be exposed to such important aspects of life in the Late Republic/Early Empire as oratorical practice, Roman epistolary correspondence, and the aims and effects of Augustus' Imperial propaganda. Students will be introduced to films, literary works, and articles that relate to this period of time and discover how current cultures are influenced by this time period. Students will continue to work on skills that assist with the language component of the SAT. This course incorporates the NJSLs within its framework.

Note: Honors Latin III requires an increased workload and more rigorous curriculum.

HONORS LATIN IV**CREDITS: 5**

(This course receives honors weighting for the calculation of the GPA)

Full Year

Prerequisite: A grade of 85 or above in Latin III

Grade 12

Honors Latin IV provides the proficient Latin III student with the opportunity to read, analyze, and interpret more challenging authors of the Latin literary canon. The course will entail extensive reading of Latin poetry and prose, analysis of Roman life and culture, and examination of Latin root words for SAT preparation. The student will continue to refine and master complex syntax, advanced translation methods, and new vocabulary. This course incorporates the NJSLs within its framework.

ESL (9, 10, 11, 12)**CREDITS: 5**

Full Year

Prerequisite: NONE

Grades: 9-12

ESL (English as a Second Language) provides instruction to students whose primary language is not English. The course follows the WIDA standards and prepares students for the ACCESS test. Students engage in reading, writing, speaking and listening through the lenses of other content areas. Level is determined based upon a student's current level of English proficiency.

MONROE TOWNSHIP HIGH SCHOOL
PROGRAM OF STUDIES WORKSHEET

Name _____ Counselor _____

Grade 09		Grade 10		Grade 11		Grade 12	
Subject	Cr	Subject	Cr	Subject	Cr	Subject	Cr
P.E./Health		P.E./Health		P.E./Health		P.E./Health	
Total Credits		Total Credits		Total Credits		Total Credits	
		<i>Cumulative Credits</i>		<i>Cumulative Credits</i>		<i>Cumulative Credits</i>	

Alternate Course Selections:

9th _____ 10th _____
 11th _____ 12th _____

Educational Goals:

Vocational Goals:

NOTES