MONTGOMERY HIGH SCHOOL GUIDEBOOK for incoming freshmen



This abbreviated (and in some areas enhanced) version of the MHS Program of Studies contains general information in addition to freshmen academic course listings. A complete listing of all courses offered at MHS (including all electives) is available online on the high school Counseling/Guidance Department website.

MONTGOMERY HIGH SCHOOL

1016 Rt. 601 Skillman, New Jersey 08558 Telephone: (609) 466-7602 Fax: (609) 466-7689

Administration

Mrs. Corie Gaylord, Director of Student Academic and Counseling Services
Mrs. Naoma Green, Vice Principal/Supervisor of
Health & Physical Education
Mrs. Melissa Hodgson, Supervisor of Social Studies
Mr. Scott Pachuta, Vice Principal
Mr. Chris Penna, Director of Athletics
Mrs. Heather Pino-Beattie, Vice Principal and Supervisor of Career Education
Ms. Alma Reyes, Supervisor of World Languages
Mrs. Jennifer Riddell, Supervisor of Mathematics
Ms. Karen Stalowski, Supervisor of English
Mr. Jason Sullivan, Supervisor of Science
Ms. Daryl Schwenck, Supervisor of Special Services
Mr. Adam Warshafsky, Supervisor of Visual & Performing Arts

Guidance Staff

Mrs. Kelly Apel, School Counselor
Mrs. Maureen Conway, School Counselor
Mr. Keith Glock, School Counselor
Mrs. Christine Grossmann, Student Assistance Counselor
Ms. Carla Hampton, School Counselor
Mr. Matthew Pogue, School Counselor
Mrs. Jessica Ritson, School Counselor
Mr. Raheel Saleem, School Counselor

Special Services Staff

Renee Colangelo, School Psychologist
Ms. Karen Krusen, Social Worker
Ms. Viveka Mandhyan, School Psychologist
Ms. Megan Matsil, Transition Coordinator
Ms. Danielle Olney, Speech/Lang Therapist
Mrs. Ellen Stein, Social Worker
Mrs. Kristen Wawrzyniak, Learning Disability Teacher Consultant

MONTGOMERY TOWNSHIP SCHOOLS

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Central Office Administration

Ms. Mary McLoughlin Superintendent of Schools
Ms. Fiona Borland, Director of Curriculum, Instruction & Staff Development
Ms. Kelly Mattis, Assistant Superintendent of Human Resources
Mr. Damian Pappa, Assistant Superintendent

GRADUATION REQUIREMENTS

All students must demonstrate successful completion of the following requirements:

NJ State Minimum* Graduation Requirements by Content Area

NJ DEPARTMENT OF EDUCATION REQUIRED ASSESSMENTS	For the most current New Jersey Department of Education Graduation requirements please visit this website: http://www.state.nj.us/education/assessment/parents/GradReq.pdf
ENGLISH/LANGUAGE ARTS LITERACY	20 credits aligned to grade 9 through 12
MATHEMATICS	15 credits including algebra I and geometry or the content equivalent**, and a third year of math that builds on the concepts and skills of algebra and geometry and prepares students for college and 21st century careers
SCIENCE	15 credits including at least five credits in laboratory biology/life science or the content equivalent**; an additional laboratory/inquiry-based science course including chemistry, environmental science, or physics; and a third laboratory/inquiry-based science course
SOCIAL STUDIES	15 credits including satisfaction of N.J.S.A. 18A:35-1 and 2; five credits in world history; and the integration of civics, economics, geography and global content in all course offerings
FINANCIAL, ECONOMIC, AND ENTREPRENEURIAL LITERACY	2.5 credits
PHYSICAL EDUCATION, HEALTH ANDSAFETY	A minimum of 3.75 credits in physical education, health & safety* during each year of enrollment, distributed as 150 minutes per week
VISUAL AND PERFORMING ARTS (Art, Music, Drama, Dance)	5 credits
ELECTIVES	15 credits
WORLD LANGUAGES	5 credits
21ST CENTURY LIFE AND CAREERS (Family/Consumer Science, Business Administration & Technology, Technology Education)	5 credits
TOTAL CREDITS (State Minimum)	120***

^{*}School districts may establish course and/or credit requirements which exceed the State minimums.

^{** &}quot;Content equivalent" means courses or activities that include the same or equivalent knowledge and skills as those found in traditionally titled courses which are required for high school graduation and which are aligned with Common Core Standards. This content must be taught by certified teachers, may be integrated in one or more courses, may be titled differently, or may present material in an interdisciplinary or spiral format.

^{***}The 120 credit total is greater than the sum of the individual requirements above, to allow for student electives.

Class of 2020 and beyond

For the most current New Jersey Department of Education graduation requirements, please visit this website: http://www.state.nj.us/education/assessment/parents/GradReq.pdf

<u>Note:</u> The information in this Guidebook is subject to change due to changes or revisions to district policies and/or state code that may occur during the school year.

EARLY GRADUATION

Parents/Guardians of a student seeking early graduation may initiate a written request for special consideration. The written request by the student's parents/guardian must be filed in the Guidance Office before March 15 of the student's sophomore year for consideration for the following year. The request must include the reasons for the student's plan for fulfilling graduation requirements. A meeting with the student's guidance counselor must follow this request. The principal will review and either approve or deny the request.

GRADING INFORMATION

Montgomery High School uses a numerical grading system based on the 100 point scale.

Grade Range: 0 - 100 Lowest Passing Grade: 60 Highest Grade Allowed: 100

For your convenience, the guidelines for letter grade equivalents are listed below:

$$A+=98-100$$
 $B+=88-89$ $C+=78-79$ $D+=68-69$ $F=0-59$ $A=93-97$ $B=83-87$ $C=73-77$ $D=63-67$ $A-=90-92$ $B-=80-82$ $C-=70-72$ $D-=60-62$

Rounding

Use standard scientific rules of rounding to the nearest whole point for all marking period grades (0.5 will be rounded up for report card only).

Weighted Grades

Although Montgomery High School does not release information regarding class rank for admission purposes, a weighted GPA is computed to provide information for scholarships and to determine valedictorian, salutatorian, and students graduating with honors. The weighted GPA is determined by adding 5 points to Honors and AP courses.

Honor Roll/Principal's Honor Roll

Students qualify for Honor Roll if they are full time students carrying a minimum of 30 credits and all unweighted grades within a marking period are 80 or better. To qualify for the Principal's Honor Roll students must carry a minimum of 30 credits and all unweighted grades within a marking period must be 90 or better.

Class Rank

Montgomery High School does not engage in the automatic calculation and reporting of class rank for students. A student's class rank shall be calculated to determine valedictorian, salutatorian, and students graduating with honors. A student's class rank will only be released to a requesting institution (such as a service academy) or a scholarship provider.

GRADE POINT AVERAGE

Montgomery High School computes two averages for students. The first computation is an unweighted or "true" average for all courses attempted. The second is a weighted average to determine valedictorian, salutatorian, and honor students.

Example: Unweighted GPA Computation

Course	Grade	Credit	Grade Points
English II Honors	90	5	450
World History	88	5	440
Biology Honors	80	5	400
Physical Education	82	<u>5</u>	<u>410</u>
		20	1700

1700/20 = 85.00 Unweighted GPA (rounded to 2 decimal places)

Example: Weighted GPA Computation

Course	Grade	Additional Points	Total	Credits	Grade Points
English II Honors	90	5	95	5	475
World History	88	0	88	5	440
Biology Honors	80	5	85	5	425
Physical Education	82	0	82	<u>5</u>	<u>410</u>
				20	1750

1750/20 = 87.50 Weighted GPA (rounded to 2 decimal places)

The student who has the highest average using the weighted computation after seven semesters is determined to be the valedictorian; the student with the second highest average using the weighted computation after seven semesters is determined to be the salutatorian. After seven semesters, the top ten percent of the class, based on the weighted computation, is deemed to be graduating with honors.

Transfer Students

All transcripts of incoming students are analyzed on an individual basis with appropriate credit and weight assigned based upon the course offerings of MHS. An honors course completed at another high school receives appropriate weight as long as a comparable course was available at MHS. A transfer student must attend MHS for his/her entire junior and senior years to be considered as valedictorian or salutatorian. Transcripts of students entering MHS from a school in another country will be given credit based on the translation of the transcript and equivalency to courses available at MHS and will receive a P (pass) or F (fail) grading. Students entering MHS with credits from an Accredited Online Program will be given the appropriate credit and a P (pass) or F (fail) will appear on their transcript for the grade.

Courses Taken Prior to High School

Any high school level courses taken prior to 9th grade may be used for advancement in a specific subject area or to satisfy a prerequisite. However, only courses taken during the student's high school career will appear on the transcript, be included in the GPA calculation, and count towards graduation requirements. A student is considered to be in 9th grade once they have successfully completed 8th grade.

Grade Level Promotion Requirements

In order for students to be promoted to the next grade level, they must have successfully completed a required amount of credits prior to the beginning of the next school year. These minimums may not meet athletic eligibility requirements. For minimum athletic eligibility requirements please refer to page 8 of the Program of Studies.

9th to 10th grade 27.5 credits 10th to 11th grade 55.0 credits 11th to 12th grade 82.5 credits

GRADING

Full Year Courses

- No grade may be lower than 50 for semester 1 of a full year course.
- The second semester grade and the final examination will reflect the actual grade earned, i.e., there is no minimum grade. A student who has attempted all course requirements will receive a grade no lower than 50 on the transcript.
- Special situation: If a student passes both semesters but has a failing average due to the final exam grade, he/she will receive a 60* (provided that the student took the exam and made a diligent effort to pass). The * contains the notation that "the passing grade was issued despite the student's failing the exam."
- Final exam
 - o Equals 12 percent of the final grade
 - o Averages with the first and second semester grades to determine the final grade
 - O Seniors who have a pre-exam average of 90 or higher are exempt from taking the exam
 - o Any student who cheats on the exam will receive a zero

Semester Courses

- No grade may be lower than 50 for the first half of the course.
- No grade may be lower than 30 for the second half of the course.
- No grade may be lower than 25 for the final exam, provided that the student took the exam and made a diligent effort to pass.
- Special situation: If a student passes both marking periods but has a failing average due to the final exam grade, he/she will receive the minimal passing grade of 60 (provided that the student took the exam and made a diligent effort to pass).
- The final exam is equal to 12 percent of the course grade.
- Any student who cheats on the exam will receive a zero.

Communication of Student Progress

All parents are encouraged to create an account to access the Montgomery Township School District Parent Access online portal.

Parents/guardians should check student progress regularly including attendance, missing assignments, and grades. If parents/guardians have questions concerning their child's academic progress, they should first contact the classroom teacher, and then if necessary, the appropriate department supervisor. For concerns about overall student progress, the parent/guardian should contact their child's school counselor.

Prerequisites, Course Placement & Waiver Applications

Counselors will guide students into proper placement for English, Math, Social Studies and World Language courses based on established prerequisites. Science placement will be based on diagnostic strategies including previous grade earned, proficiency assessments, level of interest and teacher recommendation. Placements are not finalized until June when all grades have been submitted.

MHS faculty and administrators strongly believe that the prerequisites set forth in the high school's Program of Studies are reasonable guidelines. Whenever prerequisites are not applicable, counselor and teacher recommendation should be adhered to. However, if the student did not meet the expectations that have been established for a course, but would like to challenge him or herself beyond the MHS recommendation, a waiver application must be obtained from the students' current subject teacher and submitted through the appropriate department supervisor for approval. Freshmen may only apply to waive from a College Prep to an Honors level course if they are within 3 points of the prerequisite. The deadline for student waiver submissions to a teacher is May 1st, 2021 and determinations will be made regarding their status by June 1st, 2021. In order to maintain balanced class sizes and consistent learning environments, deadlines will be strictly adhered to and level changes, if waiver is approved, will be subject to supervisor approval. Submission of a waiver application does not guarantee that it will be approved.

Timeline for waivers:

- Obtain waiver application from high school counselor for English and Social Studies, if eligible, during course request meeting in March or obtain waiver application from UMS current teacher for Math and Science, prior to May 1st, 2021.
- Waiver applications must be submitted to current course teacher by May 1st, 2021.
- Supervisors make determination by June 1st, 2021 and inform high school counselors in order to make course changes, where appropriate.
- Master schedule is begun the first week of June and is subject to change once final placements are determined.

STEM and STEAM

Montgomery High School offers a wide array of courses allowing students the opportunity to develop both introductory and advanced skills in a variety of career paths:

- Architecture
- Photography
- Graphic Design
- Industrial Materials
- Computer Languages
- Web Design
- Robotics

Some courses are specifically designated in the Program of Studies as either STEM or STEAM. STEM is an acronym for Science, Technology, Engineering, and Math education. STEM is an interdisciplinary and applied approach that is coupled with hands-on, problem-based learning. STEAM, a newer movement widely adopted by institutions, corporations, and individuals, aims to integrate Art and Design in education and place it firmly at the center of STEM.

COURSE CHANGE AND CREDIT INFORMATION

Course Withdrawal

Students are placed in courses after serious discussion among students, parents and counselors. Students are encouraged to develop persistence and resilience in honoring their commitments to course selection by attending and satisfactorily completing the courses in which they enroll.

Students have until **April 20, 2021** to make adjustments to their course requests. After this period of time, changes will only be made when concerns regarding the student's schedule are initiated through the Montgomery High School professional staff. **Requests for discretionary schedule changes will not be considered (e.g., teacher, elective courses, physical education, and early dismissal).** Only changes that are deemed educationally beneficial for the student will be considered and reviewed. Of course, parents and students will be involved in this process before any final decisions are made.

Students must carry a minimum of 3 classes a day (30 credits total) to be considered a full-time student at MHS. Any request to drop a course which would cause the students total credits to fall below the 30 credit minimum will not be permitted without administrative approval.

All course withdrawals after November 15th will result in a record of WP (Withdrawal Passing) or WF (Withdrawal Failing) on the official transcript and report card. Students may not change classes (with the exception of a level change, i.e. Honors to CP) after the class has met for 10 days for a full year course and 5 days for a semester course.

<u>NOTE:</u> Students may not withdraw from a **full year course** after semester 1 without administrative approval from the MHS Principal <u>and</u> Director of Student Academic & Counseling Services. In addition, students may not withdraw from a **semester 1 course** after November 15th or a **semester 2 course** after March 26th without administrative approval (MHS Principal <u>and</u> Director of Student Academic & Counseling Services).

Level Changes

(e.g., Advanced Placement to Honors, Honors to College Preparatory and College Preparatory to General Ed.)

All level changes should be made in consultation with the department supervisor, school counselor, teacher, and parent(s)/guardian(s). It is imperative that all parties reflect carefully on the proposed changes to determine whether they are in the student's best interest as they might have an influence on the overall student schedule.

All level changes occurring after November 15th will result in a record of WP (Withdrawal Passing) or WF (Withdrawal Failing) on the official transcript and report card. Grades earned at the time of the level change will be transferred to the new course and will be included in the cumulative average.

Incomplete Grades

When a student returns to school after an absence, he/she is responsible for making up all missed assignments. The work should be completed as soon as possible after returning to school. If the absence occurs within the last two weeks of the semester and the work is not completed by the time grades are submitted, an INC (Incomplete) is given as the marking period grade. Students have a maximum of 10 days to submit all work after the end of the marking period. Failure to do so will result in the student receiving no credit for all missing assignments with the potential of failing the semester.

Attendance

The Montgomery Township Board of Education recognizes its responsibility to provide a thorough and efficient education for every student within the district in keeping with the prevailing laws of the State of New Jersey. In order for administrators and teachers to successfully fulfill their responsibilities to students, it is essential that all students accept their responsibility to attend school as scheduled, and that parents/guardians support and reinforce their child's regular attendance. Please refer to the current Student Handbook (available online) for further details regarding attendance.

OPTION II GUIDELINES

(Alternative pathways for attaining High School Graduation Credits)

General Statement: Option II establishes alternate pathways for students of Montgomery High School to satisfy graduation requirements and meet the New Jersey State Standards in accordance with New Jersey Administrative Code {N.J.A.C. 6A:8-5.1 (a) *I ii*}. Option II alternative experiences are voluntary. Students may fulfill the requirements for graduation by pursuing credits earned through the traditional classroom environments, alternative learning experiences availed through Option II or through a combination of both programs.

Option II permits students to engage in a variety of alternative learning experiences which are stimulating and intellectually challenging, enabling them to fulfill or exceed expectations set forth by the academic department's Core Curriculum Content Standards. Students may take part in Option II alternatives by participating in the following: student exchange programs, theme-based programs, accredited college coursework, concurrent enrollment at colleges and universities, on-line and distance learning opportunities.

Transportation, personal safety and well-being, specialized equipment and any and all costs not otherwise provided by Montgomery High School will be the responsibility of the student and/or parent/guardian.

Rationale for Option II:

- 1. Credit Recovery *To make up a subject failed during regular school session*:
 - Credits are awarded after the recovery course and the respective MHS proficiency assessment have been successfully completed. Successful completion requires the minimum passing grade.
 - The course must have a minimum of 60 clock hours to recover five credits.
 - (PCR) pass credit recovery or (F) fail will be recorded on the student's transcript and a number grade of 60 will factor into the G.P.A. for a passing grade of (PCR).
 - It is the student's responsibility to have appropriate grade reports forwarded to the Guidance Office upon completion of the external course.
- 2. Original Credit *To earn credits outside of MHS for academic advancement or meet graduation requirements*:
 - Credits are awarded after the course/program and the respective MHS proficiency assessment have been successfully completed. Successful completion requires the minimum passing grade. Option II courses will only be included on the student's transcript after the course and the assessment are complete.
 - A (P) pass or (F) fail will be recorded on the student's transcript and will not affect G.P.A. If the course is taken at an accredited college or university, a letter grade will be recorded on the student's transcript; this will not be calculated into the G.P.A.
 - A copy of the transcript from the institution where an alternate class was taken must be provided to the Guidance Office and will be sent with the MHS transcript.
- 3. To Meet Grade Prerequisites *To improve grade for the purpose of meeting prerequisites ONLY:*
 - For the purpose of meeting grade prerequisites, the summer school course must be completed and no grade will be recorded on the transcript. A proficiency assessment will be required and the assessment grade will determine placement.

Application for Option II

Montgomery High School students are required to complete an application which must include an attached course syllabus/curriculum. The completed application must be given to the Montgomery High School Guidance Department and approved by the content area supervisor and school principal (or designee) **PRIOR** to enrolling in a course. The course must be offered by an accredited institution and must meet or exceed N.J. State Standards. Such courses may not take the place of a course that is a required academic course (i.e. English 9-12, U.S. History

I & II, etc.) for graduation; however, it may be taken for advancement (i.e. in math courses) only when approved by the content area supervisor. Any course taken by an MHS student without the prior approval of administration will NOT be granted course credits.

Deadlines

For summer courses, Option II applications must be submitted by May 14th, 2021 and course must be completed by August 3rd, 2021. For the fall semester, Option II applications must be submitted by September 10th, 2021 and course must be completed by January 14th, 2022. For the spring semester, Option II applications must be submitted by January 14th, 2022 and the course must be completed by June 1st, 2022. For full year courses, Option II applications must be submitted by September 24th, 2021 and the course must be completed by June 1st, 2022.

Any Option II course not completed by the course deadline will not be eligible for course credit.

Proficiency Assessments

Proficiency assessments are used for placement purposes and may also be required for Option II credits to be received. For math courses students must show a minimum proficiency on the designated assessment for the course taken. The grade earned on the assessment will determine placement in the following course or the student's ability to advance to the next course. These assessments will be administered by the MHS department supervisor or designee. These assessments are aligned with N.J. State Standards. For other courses students should be prepared to submit a portfolio of work completed, if requested by the department supervisor.

SOMERSET COUNTY VOCATIONAL TECHNICAL SCHOOL - SHARED TIME

The Somerset County Vocational-Technical High School offers a shared-time program for students who want to learn a technical trade but wants to complete their academic requirements in their local high school. Students who select this vocational shared-time option spend a portion of each day at Vocational-Technical High School and the remainder of the day at Montgomery High School. Transportation is provided at no cost both to and from the Vocational School. Upon graduation, students receive a M.H.S. diploma. (See your counselor for a description of the Vocational offerings at Somerset County Vocational-Technical School.)

Students who are interested in attending Somerset County Vocational-Technical High School are to inform their counselor by April of the semester prior to taking courses at Vo-Tech. Students and their families are encouraged to arrange on their own a tour of Somerset County Vocational-Technical High School before requesting to attend. A P (Pass) or F (Fail) will be recorded on the student's transcript *after the course is completed*.

COURSE DESCRIPTIONS

ENGLISH

11000 English Literature and Composition 9

5 credits

This is a full year, comprehensive survey of the elements of literature, language, and composition. The aim of this course is to improve students' control of the skills of communication, reading, writing (narrative writing, argumentative writing) speaking, listening and viewing – and to help them appreciate a wide selection of readings that increase students' understanding and appreciation of literature. Students are expected to write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence (N.J. State Standards). Students are expected to write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences (N.J. State Standards). Additionally, students will conduct short as well as more sustained research projects to answer a question or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

PREREQUISITE: Successful completion of 8th Grade Language Arts

AP and HONORS COURSE EXPECTATIONS - ALL LEVELS: PLEASE READ CAREFULLY

Honors level courses offered grades 9-12 and AP level courses offered in grades 11 and 12 are designed for students who wish to challenge themselves academically and desire a rigorous study of literature, language and composition. It is important to carefully consider a student's past performance in English when selecting an appropriate course of study. AP and Honors courses require students to complete additional coursework, read avidly and widely, and maintain a higher level of independent accountability than non-weighted courses. The Language Arts department offers assistance in placement decisions through teacher recommendations, diagnostic assessments describing cognitive readiness, and core competency review materials. In cases where students select a course level for which they have not met the prerequisites, the student and parent/guardian will be required to complete a waiver application that must be approved by the department supervisor pending review. It must also be understood that if a student takes an Honors or AP English course and decides to drop it, the un-weighted grade will transfer to his/her new College Prep or Honors class. Montgomery High School only administers Advanced Placement exams for students who are currently enrolled in the course at MHS for that exam.

HONORS COURSE PREREQUISITES:

11500 English Literature and Composition 9 - Honors

5 credits

PREREQUISITES: 1) 93% average for Marking Periods 1 & 2 in 8th grade Language Arts

15100 Creative Writing Seminar I (s)

2.5 credits

This is a one-semester course in which students explore writing as art. Students will read, analyze, and create works of fiction, non-fiction, drama, and poetry. Throughout the semester, the student will compile a portfolio of his/her best work. The course culminates in presentations of original manuscripts of poetry, prose, and/or criticism that demonstrate the student's growth. This course provides the time, space, materials, instruction, and skills necessary to pursue meaningful creative writing to fulfill academic and/or intrinsic goals.

PREREQUISITE: None

18100 Expository Writing Workshop (Semester 1) 18200 Expository Writing Workshop (Semester 2)

2.5 credits

The purpose of this one-semester course is to provide an intensive writing experience in a workshop environment. The emphasis will be on expository writing including essays, research reports, and transactional writing. Students will receive instruction in the forms and conventions of expository writing and will use the writing process to create fully revised and edited products. Types of writing to be explored will include narrative, descriptive and persuasive. Assessment will be based on, but not limited to rubrics adapted from the PARCC/N.J. State Standards Scoring Rubric.

PREREQUISITE: None

SOCIAL STUDIES

HONORS/ADVANCED PLACEMENT COURSE EXPECTATIONS: PLEASE READ CAREFULLY

The AP and Honors courses are designed for students who wish to challenge themselves academically and desire a rigorous course of study. It is important to carefully consider a student's past performance in Social Studies when selecting an appropriate course of study. AP and Honors courses require students to complete additional coursework, read avidly, and widely, and maintain a higher level of independent accountability than non-weighted courses. The Social Studies department offers assistance in placement decisions through teacher recommendations, diagnostic assessments describing cognitive readiness and core competency review materials. It is recommended that students who wish to challenge themselves at the honors level have earned a 90 or better in the College Prep class taken the year prior. In cases where students select a course level that was not recommended, the student and parent/guardian will be required to complete a waiver application. It must also be understood that if a student takes an honors Social Studies course and decides to drop it, the unweighted grade will transfer to his/her new College Prep class. Montgomery High School only administers Advanced Placement exams for students who are currently enrolled in the course at MHS for that exam.

21000 World Studies 5 credits

The World Studies course is a full-year course intended for all freshmen. It will fulfill the New Jersey graduation requirement of a one-year study of World History. The course begins with the Italian Renaissance and concludes with an overview of the issues of the 21^{st} century.

PREREQUISITE: None

21500 World Studies (Honors)

5 credits

The World Studies Honors course is a full-year course intended for freshmen who want to explore the course curriculum in more depth. This course will stress critical reading and analytical thinking and writing and encourage students to further develop as independent learners. It will fulfill the New Jersey graduation requirement of a one-year study of World History. The course begins with the Italian Renaissance and concludes with an overview of the issues of the 21^{st} century.

PREREQUISITES: 1) 93% average for Marking Periods 1 & 2 in 8th grade Social Studies; 2) 93% average for Marking Periods 1 & 2 in 8th grade Language Arts

MATHEMATICS

Math Prerequisites

Montgomery Township School District is committed to providing a solid foundation for its students in the area of mathematics. Because math skills are sequential, it is essential that prerequisite skills be mastered before complex courses are taken. The prerequisites are firmly based on the proficiency a student demonstrates over the entire year of work in mathematics preceding each course.

The Mathematics Proficiency Tests

The Mathematics Proficiency Tests are used to assess the proficiency of students at various stages in their mathematical education. These tests reflect questions given on Chapter/Unit tests, Quarterly Exams, and/or Final Exams for the various courses offered by the department. The following students **must participate** in the testing process:

- New students who have met the honors course requirements in another school and who wish to continue in honors at MHS
- New students who are entering MHS as a freshman.
- New students whose placement needs to be determined
- Students who wish to advance by means of an approved summer or online external course

Please note that summer and online courses do not cover the curriculum in as much depth as a full-year course. Therefore, summer or online courses are good for enrichment or review; they are not recommended to be used as a replacement for a full year math course.

30100 Math Connections I 30200 Math Connections II

2.5 credits

2.5 credits

The focus of this course is to enable students to fulfill the state requirement of targeted intervention in mathematics to help them accelerate their learning. The content clusters covered in this course are: 1) Ratios and Proportional Relationships, 2) The Number System, 3) Expressions and Equations, 4) Geometry, 5) Statistics and Probability. Skills and strategies for standardized test taking are developed. Problem solving with mathematical concepts is practiced and expanded upon in the area of Functions and their real life application.

31200 Algebra I 5 credits

Algebra I is the first course in the college preparatory program in mathematics. Emphasis is placed upon the development and understanding of the real number system and the basic structure of Algebra. Also, the course helps students develop an appreciation for logical problem-solving and deductive reasoning as well as precision in the communication of mathematical ideas and its context to real world. A scientific calculator is required. *PREREQUISITE: Successful competition of Algebra I, Part 1*

31250 Algebra I with Lab

6 credits

Algebra I is the first course in the college preparatory program in mathematics. This course differs from the Algebra I non Lab class by providing a half of block more time devoted to Function comprehension, number properties and Linear Equations. It then completes the development and understanding of the real number system and the basic structure of Algebra. Logical problem solving, deductive reasoning and precise communication of mathematical ideas are expanded upon as per the State Learning Standards. A scientific calculator is required. *PREREQUISITE: Successful competition of Pre-Algebra*

32200 Geometry 5 credits

Geometry combines the essential elements of plane geometry and the basics of solid geometry. Strong emphasis is placed on deductive reasoning and writing original proofs. In addition, the student is given the opportunity to develop powers of spatial visualization, strengthen basic algebraic skills, and learn to use precise and clear mathematical language. A strong background in Algebra I is required from the beginning of the course. A scientific calculator is required.

PREREQUISITE: Successful completion of Algebra 1

32250 Geometry with Lab

6 credits

Geometry combines the essential elements of plane geometry and the basics of solid geometry. Deductive reasoning, logic in proof writing and physical constructions are emphasized. Students will develop spatial visualization, precision in measurement, and establish language for geometric figures and their properties and characteristics while strengthening algebraic skills.

PREREQUISITE: Successful completion of Algebra I, priority is given to Algebra I Lab students

32500 Geometry Honors

5 credits

This course is designed for students who want a more challenging approach to geometry and who plan on taking additional mathematics courses in college. It combines the essential elements of plane geometry and the basics of solid geometry. Strong emphasis is placed on deductive reasoning and solving complex original proofs. Additional topics include introductory trigonometry, coordinate geometry and transformations. A strong background in Honors Algebra I will be required from the beginning of the course, and students will be expected to understand the concepts taught in class, as well as to transfer them to novel applications and problem solving situations. A scientific calculator is required.

PREREQUISITE: 85% in Algebra I Honors or 95% in Algebra I taken over a school year

33200 Algebra II 5 credits

Algebra II is the third course in the regular college preparatory program in mathematics. The course reviews basic terminology, concepts, skills, and applications of Algebra I by means of a critical examination of the real number system. Algebra II furthers the development of working with Algebra I concepts with new major topics expanding the students' knowledge of Algebra and preparing them for higher level mathematics courses. These Major topics include: simplifying and solving rational expressions and equations; solving and graphing non-linear functions; working with powers, roots, and radicals; sequences, series, probability/statistics, applications of new functions and an introduction to trigonometry. Throughout the course, students use scientific and graphing calculators as a tool for processing data, performing calculations, and exploring. Scientific and graphing calculators are required.

PREREOUISITE: 70% in Algebra 1 and 70% in Geometry

33500 Algebra II Honors

5 credits

Algebra II Honors is designed for students who want a more challenging approach to Algebra II and who plan on taking additional honors mathematics courses in the future. The students study the structure of the real and complex number systems, develop the concept of systems of equations in two and three variables, determinants, polynomial equations and functions, rational expressions, sequences and series, probability/statistics, exponential equations, logarithms, and trigonometry. A strong background in Honors Algebra I and Honors Geometry will be required from the beginning of the course, and students will be expected to understand the concepts taught in class, as well as to transfer them to novel applications and problem solving situations. Scientific and graphing calculators are required.

PREREQUISITE: 85% in Geometry-Honors or 95% in Geometry AND 85% in Algebra I-Honors or 95% in Algebra I

35000 PreCalculus 5 credits

This college preparatory course covers all the fundamental topics that prepare students for calculus. Emphasis is on problem solving and the study of relations, functions, equation solving, and graphing. The functions studied include polynomial, conics, rational, exponential, logarithmic, trigonometric, and inverse functions. Upon entering this course, students must have a strong working knowledge of the mechanics of Algebra II, and be able to grasp the more theoretical concepts that form the foundation for calculus. Scientific and graphing calculators are required.

PREREQUISITE: 80% in Algebra II or 75% in Advanced Algebra and Trigonometry or 65% in Algebra II-Honors

35500 Precalculus Honors 5 credits

This course is a full year Precalculus course, which presents an in-depth examination of analytic trigonometry, trigonometric functions, exponential and logarithmic functions, polynomial and rational functions, and introduction to limits. The intent is to study and apply advanced mathematical topics while developing the student's abstract and critical thinking skills. A strong background in Honors Algebra II will be required from the beginning of the course, and students will be expected to understand the concepts taught in class, as well as to transfer them to novel applications and problem solving situations. Scientific and graphing calculators are required.

PREREQUISITE: 85% in Algebra II-Honors or 95% in Algebra II

SCIENCE

Three core science courses are required for graduation. The normal sequence is Integrated Physical, Earth & Life Sciences (IPELS), Chemistry, and Biology. Modification of the established course sequence requires approval of the MHS Science Supervisor. A student may replace one of these courses with the corresponding advanced placement course, though it is normally recommended that students take AP courses as their second course in the subject of interest. Montgomery High School only administers Advanced Placement exams for students who are currently enrolled in the course at MHS for that exam.

<u>All students</u> will participate in a comprehensive science assessment, the New Jersey Student Learning Assessment-Science (NJSLA-S), in the spring of their junior year.

** It is important to carefully consider a student's past performance in science and mathematics when selecting an appropriate course of study. AP and Honors courses require students to complete additional coursework, utilize advanced mathematical expertise, and maintain a higher level of independent accountability than non-weighted courses. Additionally, Honors and AP level courses require more developed scientific writing and expect students to engage in more sophisticated experimental design. The MHS Science program does not maintain any minimum grade prerequisites for entrance into various course levels; however students earning below a 75% in the previous year's science course will not be eligible to submit a waiver for a science course the following year. The Department offers assistance in placement decisions through teacher recommendations, diagnostic assessments describing cognitive readiness, and core competency review materials. In cases where students select course level that was not recommended, the student and parent/guardian will be required to complete a waiver application. Please carefully review the information on page 6 for protocols and requirements related to course level changes. Waivers submitted past the published deadline will not be considered.

41700 Integrated Physical, Earth and Life Sciences

5 credits

Integrated Physical, Earth and Life Sciences (IPELS) is a college preparatory laboratory science designed for students taking their first MHS science course. IPELS explores phenomena in the natural world through a combination of science disciplines. Students will approach topics from both a scientific and societal perspective. The course incorporates engineering design principles while developing scientific models of earth and space systems, global climate science, and forces and interactions between objects. Students will design lab investigations and use data to investigate cause and effect relationships, generate scientific representations, compare structure and function, construct an understanding of energy storage modes, and identify patterns through analysis of proportions and quantities. Students in IPELS will identify questions, plan investigations, analyze data, and communicate with other members of the learning community. The appropriate NJ State and National Standards will be addressed so as to raise the level of student discourse and develop essential scientific reasoning skills. IPELS will initiate a theme of energy that will continue in chemistry, followed by biology. This course is open to all students.

41800 Integrated Physical, Earth and Life Sciences (Honors)

5 credits

Honors Integrated Physical, Earth and Life Sciences (HIPELS) is a college preparatory laboratory science designed for students taking their first MHS science course. HIPELS explores phenomena in the natural world through a combination of science disciplines. Students will approach topics from both a scientific and societal perspective. The course incorporates engineering design principles while developing scientific models of earth and space systems, global climate science, and forces and interactions between objects. Students will design sophisticated lab investigations and use data to investigate cause and effect relationships, generate scientific representations, compare structure and function, construct an understanding of energy storage modes, and identify patterns through analysis of proportions and quantities. HIPELS students will be expected to have advanced mathematical and scientific writing skills. Students in HIPELS will identify questions, plan investigations, analyze data, and communicate with other members of the learning community. The appropriate NJ State and National Standards will be addressed so as to raise the level of student discourse and develop essential scientific reasoning skills. HIPELS will initiate a theme of energy that will continue in chemistry, followed by biology. It is

highly recommended that students have demonstrated aptitude in proportional reasoning and advanced proficiency in algebra before enrolling in this course. This course is open to all students.

WORLD LANGUAGES

World Language instruction centers on developing proficiency in languages other than English and understanding the perspectives of those related cultures. Language proficiency is developed over time, through sequential building of knowledge and skill practice. Sequential programs starting in grade 9 are offered in French, German, Latin, and Spanish. We strongly encourage students to complete as many years of a language sequence as possible. Students who are uniquely positioned for multilingualism will be encouraged to study multiple languages, to develop full literacy in heritage languages and to pursue the New Jersey Seal of Biliteracy (see district website).

Prerequisites

Program sequences provide skill practice to build communication competencies and students are expected to demonstrate mastery of foundational skills before enrolling in upper level courses. Pre-requisites for courses are firmly based on the proficiency that a student demonstrates over the entire year of work in the preceding course.

Placement Testing

Placement tests are used to measure student knowledge and performance along the program continuum for the purposes of determining the course for which that student should register.

The following students must participate in placement testing:

- Students new to the district or to the program whose placement needs to be determined;
- Students new to the district who have met honors course requirements in another school and who wish to continue in honors at MHS.

Proficiency Testing

Language proficiency tests are used to assess student skills at various stages of their world language education. These tests reflect language structure mastery and vocabulary development as assessed on unit and final exams for various courses offered by the department and measure student proficiency in reading, writing, speaking and listening.

The following students must participate in the proficiency testing:

- Students wishing to study a language with which they have extensive experience in an immersion setting, or of which they are a native or heritage speaker;
- Students who wish to advance by means of an accredited summer or online course equivalent which has been pre-approved by the department through the Option II application process.

Note 1: Summer and online courses traditionally do not cover the curriculum in as much depth as a full-year course. Therefore, although summer or online courses are good for enrichment, they are not recommended as a replacement for a full-year world language course.

Note 2: Students from the Upper Middle School register for French, German or Spanish Level 1 at Montgomery High School. Students having earned 85% or better in French 1b, German 1b and Spanish 1b may register for level 2.

Seal of Biliteracy

The New Jersey Seal of Biliteracy is an acknowledgment by the New Jersey Department of Education that a student has achieved mastery of two or more languages. It encourages students to pursue biliteracy, honors the skills they attain, and provides evidence of skills that are attractive to future employers and college admissions offices.

Interested students must sit for a state-approved language proficiency exam on which they achieve the Intermediate Mid-level according to the American Council on the Teaching of Foreign Languages' Proficiency

Guidelines. They also must demonstrate English proficiency by meeting the New Jersey English Language Arts graduation requirement or the appropriate cut score on the ACCESS for English Language Learners.

Information and an application to participate, is distributed to juniors and seniors in the fall by their world language teachers or guidance counselors. Further information may be found on the NJDOE's official Biliteracy Seal page and on the Montgomery High School World Languages webpage.

51100 French 1 5 credits

This course meets state graduation requirements for World Languages and NJ Student Learning Standard 7.1. Students progress towards American Council of Teachers of Foreign Language (ACTFL) novice-mid proficiency. The novice-mid language learner understands and communicates at the word level and can independently identify and recognize memorized words and phrases that bring meaning to text. Course objectives are for students to demonstrate competence in all communication modes using thematic vocabulary with emphasized language structures, which include the present, near future and recent past tenses. Thematic Vocabulary units are Getting to Know One Another; My Family and Home; School and Leisure Time; and Around Town. Major cultural points of focus and projects include the Francophone World, My Family Album and Paris.

PREREQUISITE: None

51200 French 2 5 credits

This course meets state graduation requirements for World Languages and NJ Student Learning Standard 7.1. Students progress towards American Council of Teachers of Foreign Language (ACTFL) novice-high proficiency. The Novice-High language learner has progressed from understanding and communicating at the word level to understanding and communicating at the sentence level and can use words, lists, and simple sentences to identify the main idea and some supporting details when reading; understand the gist and some supporting details of conversations dealing with everyday life; infer the meaning of some unfamiliar words when used in familiar contexts. Course objectives are for students to demonstrate competence in all communication modes using thematic vocabulary with emphasized language structures, which include the present, passe compose and imperfect tenses. Thematic vocabulary units are My Daily Routine; Family Relationships; My Health; and My Childhood.

PREREQUISITE: Successful completion of MHS French 1 or UMS French 1b with 85% or better

52100 German 1 5 credits

This course meets state graduation requirements for World Languages and NJ Student Learning Standard 7.1. Students progress towards American Council of Teachers of Foreign Language (ACTFL) novice-mid proficiency. The novice-mid language learner understands and communicates at the word level and can independently identify and recognize memorized words and phrases that bring meaning to text. Course objectives are for students to demonstrate competence in all communication modes using thematic vocabulary with emphasized language structures, which include the present, near future and modal verbs. Thematic Vocabulary units are Getting to Know One Another; My School; A Party!; and On the Weekend.

PREREQUISITE: None

52200 German 2 5 credits

This course meets state graduation requirements for World Languages and NJ Student Learning Standard 7.1. Students progress towards American Council of Teachers of Foreign Language (ACTFL) and state standards novice-high proficiency. The Novice-High language learner has progressed from understanding and communicating at the word level to understanding and communicating at the sentence level and can use words, lists, and simple sentences to identify the main idea and some supporting details when reading; understand the gist and some supporting details of conversations dealing with everyday life; and infer the meaning of some unfamiliar words when used in familiar contexts. Course objectives are for students to demonstrate competence in all communication modes using thematic vocabulary with emphasized language structures which include the present perfect, preterite, and future tenses; the accusative and dative cases; present and past tenses of modal

verbs. Thematic vocabulary units are: Holidays & Celebrations; Travel Adventures; A Look Back; Technology & Media

PREREQUISITE: Successful completion of MHS German 1 or UMS German 1b with 85% or better

53100 Spanish 1 5 credits

This course meets state graduation requirements for World Languages and NJ Student Learning Standard 7.1. Students progress towards American Council of Teachers of Foreign Language (ACTFL) novice-mid proficiency. The novice-mid language learner understands and communicates at the word level and can independently identify and recognize memorized words and phrases that bring meaning to text. Course objectives are for students to demonstrate competence in all communication modes using thematic vocabulary with emphasized language structures, which include the present tense and reflexives, near future and recent past tenses. Thematic vocabulary units are Let's get Started!; My Family-my Home; In and after school; and What we eat and where?

PREREQUISITE: None

53200 Spanish 2 5 credits

This course meets state graduation requirements for World Languages and NJ Student Learning Standard 7.1. Students progress towards American Council of Teachers of Foreign Language (ACTFL) novice-high proficiency. The Novice-High language learner has progressed from understanding and communicating at the word level to understanding and communicating at the sentence level and can use words, lists, and simple sentences to identify the main idea and some supporting details when reading; understand the gist and some supporting details of conversations dealing with everyday life; infer the meaning of some unfamiliar words when used in familiar contexts. Course objectives are for students to demonstrate competence in all communication modes using thematic vocabulary with emphasized language structures, which include the present, preterite and imperfect tenses. Thematic vocabulary units are City and Country, Planes, Trains and Automobiles, Celebrations and The World of Technology.

PREREQUISITE: Successful completion of MHS Spanish 1 or UMS Spanish 1b with 85% or better

55100 Latin 1 5 credits

This course meets state graduation requirements for World Languages and NJ Student Learning Standard 7.1. Students progress towards American Council of Teachers of Foreign Language (ACTFL) novice-mid proficiency. The novice-mid language learner understands and communicates at the word level and can independently identify and recognize memorized words and phrases that bring meaning to text. Course objectives are for students to demonstrate competence primarily in the interpretive and presentational modes of communication. This introduction to the language emphasizes the acquisition of reading skills and presents basic grammatical structures. It also acquaints the students with the history, culture and literature of the Romans.

PREREQUISITE: None

21st CENTURY LIFE AND CAREERS or CAREER TECHNICAL EDUCATION

The State of New Jersey requires high school graduates to have 5 credits of 21st Century Life and Careers or Career Technical Education (CECFLS) and 5 credits of Visual and Performing Arts (VPA). The curricula for the courses described below have been written to comply with the N.J. State Standards in both these areas. Students who wish to take more than the 5 required credits in either of these course groups must plan their elective program carefully. Typically the senior year has fewer required courses allowing students to take several electives during that year. Students wanting to take four years of either concentration (VPA or CECFLS) could meet the requirement for the other grouping by scheduling the 5 credits (2 one-semester courses or one full year course) in his/her senior year.

Career Exploration

60100 Journalism I 5 credits

Students in Journalism learn how to compose news stories, feature articles, and editorials. Trends in layout, production, and graphics are also examined. The course also aims at developing students' understanding of the impact of high technology on journalism. Students are required to write articles for the school's newspaper and to assist with the yearbook, if necessary.

PREREQUISITE: Open to all students in grades 9-12 who have received a grade of 75% or better in the required English program

Computer Applications/Computer Science

62200 Introduction to Computer Languages (s) *STEM*

2.5 credits

The need for computer programmers is growing in all fields of study for the 21st century. This course is for students who want to explore computer programming, or who have had no previous programming experience and want to find out what it's all about. Students will explore three programming languages: Scratch, Visual Basic.Net and C++. They will increase their problem solving skills by writing programs that solve real world/business related problems.

PREREQUISITE: None

62400 Foundations of JAVA (s) *STEM*

2.5 credits

Java is currently one of the fastest growing computer programming languages used in developing computer programs. Students will learn the fundamental concepts of programming with algorithm design and code implementation. Students will be taught how to write efficient computer programs including graphics. This course consists of interesting individual/group programming projects and case studies that they are likely to encounter in the real world. Students will learn how to build applets and how to write programs that display graphical shapes. This course will satisfy the prerequisite for AP Computer Science.

PREREOUISITE: None

62500 Game Design & Application Development (s) *STEM*

2.5 credits

This one semester course will engage students in a project-based curriculum that teaches the game design and application development process. Game and application design is considered one of the fastest growing, most exciting career areas in computer programming. Students will be introduced to game design and creation software which will allow them to create many different types of games and applications including action, adventure and puzzle.

PREREQUISITE: None (although it is recommended that students have prior programming experience)

62610 Webpage Design & Development (s) *STEAM*

2.5 credits

This course is an introduction to the design, creation and maintenance of visually dynamic web pages and websites. Students will create polished, professional-looking websites using Adobe Creative Suite featuring Dreamweaver and Flash. Valuable technical and applicable skills will be stressed that can be used throughout

one's career in the 21st century. A brief review of HTML code will also be covered. Students work in an exciting project based environment.

PREREQUISITE: None

Business Administration

61100 Basic Accounting (s)

2.5 credits

The field of business is for individuals looking for an exciting career; one that offers earnings potential, pleasant working conditions, and opportunities for advancement. Every industry needs accounting and employment of accountants is predicted to grow faster than all other occupations through 2016. Basic Accounting will introduce students to the accounting cycle, which will serve as a sound background for employment in office jobs, owning your own business, and preparation for post-secondary institutions. Students will be introduced to the computerized accounting cycle stressing skills needed for producing financial statements for both a single proprietorship and a partnership.

PREREQUISITE: None

61600 Financial Literacy (s)

2.5 credits

Every student needs to manage their finances now, and throughout adulthood. Financial Literacy addresses the need for all students to learn how to earn, invest, manage and keep their money. Through exciting, student-centered activities and projects that require 21st century skills, our students will master career explorations, money management, credit, saving and investing, informed purchasing, civic financial responsibility and risk management. This course will satisfy the 2.5 credits in Financial Literacy mandated by the State of New Jersey. *PREREQUISITE: None*

61400 Introduction to Entrepreneurship (s)

2.5 credits

Owning your own business is the "American Dream." An entrepreneur attempts to earn a profit by taking the risk of operating a business. Students will learn about the fastest growing form of business, electronic commerce. Analyzing markets, sales and advertising strategies, obtaining capital, modern management techniques, managing personnel, website creation and much more are taught. The course will inform students of their financial responsibilities as citizens, students, family members, consumers and active participants in the business world. Included are guest speakers and computer simulations. This course will satisfy the 2.5 credits in Financial Literacy mandated by the State of New Jersey.

PREREQUISITE: None

61500 Sports and Entertainment Marketing (s)

2.5 credits

Sports and Entertainment Marketing is an exciting, student driven course designed for students who are interested in pursuing a career in business as well as the sports and entertainment industries. This course will emphasize some of the core concepts in marketing/business as they pertain to these two competitive industries. Some of these core concepts include market research, corporate sponsorship, endorsements, target marketing, etc. Students will develop critical thinking, decision making, and communications skills utilizing real world applications. This course will be extremely beneficial for any student looking to pursue a major in business and an eventual career in business. Outside of the normal classroom activities, students will get the opportunity to listen to a wide variety of guest speakers from the sports and entertainment industries, examine case studies, and visit various sports and entertainment venues, thus, supplementing all of the core concepts that are being discussed in class.

PREREQUISITE: None

Communication Technology

63100 Television Production I (s)

2.5 credits

The student is introduced to television techniques and the use of television as a mass communication medium. Working as a member of a production team, each student writes directs, and produces videos for use on the MHS cable television station, in house productions, or special video production for use within the school. Students experience studio practice, camera direction, lighting and editing using special effects. Students gain television production experience using interdisciplinary projects and the development of cooperative problem solving skills as a major focus. Students are expected to produce a minimum of one video every other week.

PREREQUISITE: None

63400 Radio Broadcasting (s)

2.5 credits

This semester long course is designed to provide M.H.S. students with experience in radio broadcast delivered to the public via internet streaming. Students will gain experience in the everyday running of an internet based radio studio utilizing both live as well as pre-recorded formats. Students will develop skills essential to the following positions: on air talent, producer, public relations/marketing, studio engineer, etc./ Students will be responsible for programming the day's music/promos as well as developing weekly live broadcast shows revolving around various genres of music, talk show format, and the eventual airing of live M.H.S. sports and events broadcasts. Utilizing a project based, student driven curriculum, M.H.S. students will gain an appreciation for various aspects of radio broadcasting, ultimately realizing how significant these concepts are to all careers within the realm of communications.

PREREQUISITE: None

Industrial Arts/Pre-Engineering

65100 Media & Graphic Communication I (s) *STEAM*

2.5 credits

Media & Graphic Communication I will explore the foundations and applications of modern printing, photography, computer graphics and different forms of graphic reproduction. Students will learn the history and development of graphic arts as well as career opportunities related to communication technology. In addition to Lithographic Technology students will be taught screen making, and sketching/typography. Small problem-solving activities will include ways to develop and solve design challenge activities.

PREREQUISITE: None

66100 Architectural Design I (s) *STEAM*

2.5 credits

Architectural Design I is designed to introduce the fundamentals of architectural design principles and techniques. Students will learn to hand sketch plans and how to use a Computer Assisted Design (CAD) program to do architectural design. A major emphasis is placed on learning how residential and commercial systems are designed, planned and constructed. This course will engage students in real-world design activities such as designing houses, kitchens and bathrooms.

PREREQUISITE: None

67100 Engineering Design & Material Fabrication I (s) *STEAM*

2.5 credits

Engineering Design & Material Fabrication I is designed to introduce the fundamentals of material processing techniques. This course emphasizes safety and will engage students in real-world design activities. It is project oriented and designed to teach hand, power, and machine tool skills as well as the knowledge needed to support those skills. Students will become familiar with manual operations and the utilization of automated equipment. This course explores the nature and impact of technology in our everyday lives.

PREREQUISITE: None

68100 Power, Energy & Transportation Technology(s)

2.5 credits

Power, Energy & Transportation Technology studies a wide view of transportation technologies. Students will learn the history and development of the internal combustion engine. This includes the theory of operation for two and four stroke engines. They will identify basic model series and perform full disassembly and reassembly

of their engines. Students will be given small problem solving activities which will include testing different parts of their engines numerous times throughout the course. Lastly they will paint and test their engines for operation. *PREREQUISITE: None*

69000 Engineering I (s) *STEAM*

2.5 credits

Engineering is designed for students seeking a more specific course of study devoted to the engineering disciplines. Major emphasis is placed on engineering design and fundamentals. Students will start the course by learning isometric sketching skills. There will be an extensive use of 2D and 3D computer aided design and drafting (CADD) programs that are used in industry today. The use of precision measuring equipment will be used in reverse engineering and design projects. This course is designed for the student interested in pursuing Engineering in college.

PREREQUISITE: None

Family & Consumer Sciences/Culinary Arts

64100 Introduction to Culinary Arts (s)

2.5 credits

The class is designed to familiarize students with the basic techniques of food preparation. Students will prepare appetizers, entrees, side dishes, desserts and snacks that incorporate each of the food groups. Nutrition, meal preparation, food selection, preparation techniques, sanitation and food service will be emphasized. Careers in food service and management will be explored.

PREREQUISITE: None

64500 The Art of Baking (s)

2.5 credits

This semester long course is designed to provide M.H.S. students with experience in the exciting culinary world of cake making and decorating. With the popularity of shows like *Cake Boss* and *Cupcake Wars*, decorative baking has become an extremely popular niche within the culinary world. Students will gain experience in baking specific desserts as well as decorating them. Students will develop skills essential to being a successful baker. Furthermore, these skills can easily be transferred into the everyday lives of anyone that simply enjoys baking. Students will be responsible for researching various types of cakes, baking them to industry standard, and decorating them. Utilizing a project based, student driven curriculum, M.H.S. students will gain an appreciation for various aspects of baking and cake decorating, ultimately realizing that they are easily able to transfer these skills into their everyday lives.

PREREQUISITE: None

64300 Fashion and Clothing (s)

2.5 credits

Basic fashion appreciation and construction will be learned through a hands-on approach. Students will learn about: wardrobe planning, personal style selection, consumer skills, textiles and clothing care. Students will learn to create a garment using a commercial pattern, operate a sewing machine and various clothing construction equipment. Independent work on their projects will be on going throughout the semester. Students will also gain basic knowledge of careers available in the fashion industry.

PREREQUISITE: None

VISUAL & PERFORMING ARTS

VISUAL ART

70000 Introduction to Studio Art (s)

2.5 credits

This is a semester course designed to provide a foundation in the visual arts and design. Students will explore their creativity while learning how to paint, draw, and sculpt as well as use other exciting media. This class is designed to provide beginning students with guided experiences in materials, media, and basic art concepts. Because the intention of this course is to introduce students to the world of making art, grades are based upon students' willingness to experiment with new skills and explore their creativity. Come explore your creativity!

PREREQUISITE: None

70100 Studio I (s) 2.5 credits

Studio I introduces students to new materials and techniques through guided concepts and assignments. Students will be given concepts and allowed to explore them through their own individual voice. Studio I is a semester course that helps the student develop their own visual literacy. This is the introductory course to the studio sequence. Upon completion of this course, students will be prepared to move forward to Studio II.

PREREQUISITE: Successful completion of Introduction to Studio Art at MHS or recommendation of art teacher from UMS or MHS.

71100 Photography I (s) *STEAM*

2.5 credits

Photo I is a semester course designed to provide a foundation in 35mm black and white analog photography while giving students a strong foundation in visual arts. Signature experiences will be tempered by smaller assignments, technical lessons and demonstrations. This course introduces the four major areas of study in the fine arts: Themes and Forms, Core Concepts, Techniques and Tools, and Culture & History. A 35mm manual camera is not required but strongly recommended.

PREREQUISITE: None

73000 Introduction to Digital Art and Drawing *STEAM*

2.5 credits

This semester course provides a foundation in Digital and Digital-Hybrid Studio Art. Students will explore their creativity while learning basic art techniques and concepts. In short, students will learn to draw, build their confidence, and have the opportunity to try some of the powerful digital tools available online and in the classroom. Beginning students will have guided lessons that combine media such as printmaking, collage, drawing, scanner art, VR, and the Adobe suite.

PREREQUISITE: None

70600 Ceramics (s) 2.5 credits

Ceramics is a semester course that explores hand built and wheel-thrown ceramics. Students will develop their awareness of the Elements and Principals of Design as they apply to the sculptural form, bas relief and pottery. They will experience additive, subtractive, wheel thrown and glazing methods. This course introduces the four major areas of Study in the fine arts: Themes & Forms; Core Concepts; Techniques & Tools: and Culture & History.

PREREQUISITE: None

MUSIC

75000 Symphonic Band 5 credits

Symphonic Band is for students in 9th through 12th grade. The objectives of the course are to increase individual instrumental proficiency skills; increase ensemble skills pertaining to the concert band idiom; deepen students' understanding of their musical intelligence and knowledge; enhance appreciation of music; enhance self-awareness and self-esteem; increase self-reflection and creative thinking skills; stress individual and group responsibility through membership in a democratic organization; foster pride in Montgomery High School; develop self-discipline through the study and performance of demanding music; and to develop poise and self-confidence through public performance. The Symphonic Band performs a minimum of three times per year. Repertoire performed is normally grade III and IV. Marking period grades are determined by a number of factors, to include attendance at and preparation for lessons with the band director during unit lunch, successful presentation of mandatory concerts, individual repertoire playing assessments, individual pedagogical benchmark assessments, student-graded rehearsals and concerts, homework completion, and class preparation.

PREREQUISITE: Successful completion of band in the previous year or successful audition with permission of the director

75200 Wind Ensemble 5 credits

Wind Ensemble is open to 9th through 12th grade students and is the highest skill level curricular band class. Students in the wind ensemble will engage in a rigorous study of advanced wind band repertoire that is normally performed at the collegiate or professional level. The objectives of the course are to teach students advanced levels of instrumental pedagogy skills; achieve collegiate level ensemble skills that pertain to the wind band idiom; deepen students' understanding of their musical intelligence and knowledge; enhance appreciation of music through exposure to and performance of quality repertoire; enhance self-awareness and self-esteem; increase self-reflection and creative thinking skills; stress individual and group responsibility through membership in a democratic organization; foster pride in Montgomery High School; develop self-discipline through the study and performance of demanding music; and to develop poise and self-confidence through public performance. The Wind Ensemble performs a minimum of four times per year, usually more. Students may also be asked to attend a few weekend rehearsals during the school year, schedule permitting. Wind Ensemble students are expected to work to their highest levels with grade level IV - VI repertoire being performed. Participation is governed by a rigid consideration for proper instrumentation and balance. Marking period grades are determined by a number of factors, to include attendance at and preparation for lessons with the band director during unit lunch, successful presentation of mandatory concerts, individual repertoire playing assessments, individual pedagogical benchmark assessments, student-graded rehearsals and concerts, homework completion, and class preparation.

PREREQUISITE: Successful completion of a curricular band in the previous year as well as a successful audition with the director

76000 Concert Orchestra 5 credits

Concert Orchestra is for students in 9th through 12th grade. The objectives of the course are to increase individual instrumental proficiency skills; increase ensemble skills pertaining to the string orchestra idiom; deepen students' understanding of their musical intelligence and knowledge; enhance appreciation of music; enhance self-awareness and self-esteem; increase self-reflection and creative thinking skills; stress individual and group responsibility through membership in a democratic organization; foster pride in Montgomery High School; develop self-discipline through the study and performance of demanding music; and to develop poise and self-confidence through public performance. The Concert Orchestra performs a minimum of three times per year. Repertoire performed is normally grade III and IV. Marking period grades are determined by a number of factors, to include attendance at and preparation for lessons with the orchestra director during unit lunch, successful presentation of mandatory concerts, individual repertoire playing assessments, individual pedagogical benchmark assessments, student-graded rehearsals and concerts, homework completion, and class preparation.

PREREQUISITE: Successful completion of orchestra in the previous year or successful audition with permission of the director

76100 Chamber Orchestra 5 credits

Chamber Orchestra is open to students in the 9th through 12th grades and is the highest skill level curricular orchestra class. Students in the chamber orchestra will engage in a rigorous study of advanced string orchestra and full orchestra repertoire that is normally performed at the collegiate or professional level. The objectives of the course are to teach students advanced levels of instrumental pedagogy skills; achieve collegiate level ensemble skills that pertain to the orchestra idiom; deepen students' understanding of their musical intelligence and knowledge; enhance appreciation of music through exposure to and performance of quality repertoire; enhance self-awareness and self-esteem; increase self-reflection and creative thinking skills; stress individual and group responsibility through membership in a democratic organization; foster pride in Montgomery High School; develop self-discipline through the study and performance of demanding music; and to develop poise and selfconfidence through public performance. The Chamber Orchestra performs a minimum of four times per year, usually more. Students may also be asked to attend a few weekend rehearsals during the school year, schedule permitting. Chamber Orchestra students are expected to work to their highest levels with grade level IV - VI repertoire being performed. Participation is governed by a rigid consideration for proper instrumentation and balance. Marking period grades are determined by a number of factors, to include attendance at and preparation for lessons with the orchestra director during unit lunch, successful presentation of mandatory concerts, successful individual repertoire playing assessments, individual pedagogical benchmark assessments, student-graded rehearsals and concerts, homework completion, and class preparation.

PREREQUISITE: Successful completion of a curricular orchestra in the previous year as well as a successful audition with the director

77000 Concert Choir 5 credits

This course welcomes students to a dynamic and challenging musical environment. Through a myriad of vocal music genres, students will strengthen their ability to vocalize and develop their fluency of vocal art music. Objectives of this course are to increase vocal skills, develop an appreciation and knowledge of ensemble singing, promote individual and communal growth, create a sense of self-discipline and confidence in using their voice, and create a solid foundation of musicianship. Participation in performances is a course requirement. Marking period grades are determined by a number of factors, to include successful presentation of mandatory concerts, individual repertoire singing assessments, individual pedagogical benchmark assessments, graded sectionals and concerts, homework completion, and class preparation.

THEATER ARTS

73100 Introduction to Drama I (s)

2.5 credits

This is an introductory elective course with emphasis on theater exercises, theater games, mime, and improvisations. Additionally, mini-lectures are given on dramatic literature, history of the theater, technical terms and stagecraft, and play reading and critiquing.

PREREQUISITE: None

73200 Introduction to Drama II (s)

2.5 credits

This course is a practical workshop incorporating readings from the classics and modern dramatic literature, improvisations, mime, auditioning techniques, and preparation for the production of a play.

PREREQUISITE: Successful completion in Introduction to Drama I or teacher approval

74000 Public Speaking (s)

2.5 credits

Public Speaking is a one-semester course that teaches communication skills in listening, speaking, reading and writing. It gives students the opportunity to explore a variety of ways to communicate to different groups of people.

PREREQUISITE: None

2021-2022 Freshmen Course Selection Option Sheet

ALL SCHEDULING REQUEST CHANGES MUST BE MADE BY APRIL 16, 2021

ENGLISH		CAREER EXPLORATION	
English Literature & Comp 9	11000	Journalism I	60100
English Literature & Comp 9-H	11500	Basic accounting (S)	61100
Creative Writing Seminar I (S)	15100	Intro to Entrepreneurship(S)	61400+
Expository Writing Wrkshp (S1)	18100	Sports Entertainment & Marketing (S)	61500
Expository Writing Wrkshp (S2)	18200	Financial Literacy (S)	61600+
E.S.L.	93100	Intro to Computer Lang. (S)	62200
E.S.L. Lab	93150	Foundations of JAVA (S)	62400
		Gaming Design & Appl. Devel.(S)	62500
SOCIAL STUDIES		Web Page Design & Develop. (S)	62610
World Studies	21000	Television Production I (S)	63100
World Studies-H	21500	Radio Broadcasting (S)	63400
		Intro to Culinary Arts (S)	64100
MATHEMATICS		Fashion & Clothing (S)	64300
Algebra I	31200	The Art of Baking (S)	64500
Algebra I w/ Lab	31250	Media & Graphic Comm. I (S)	65100
Geometry	32200	Architectural Design I (S)	66100
Geometry w/ Lab	32250	Eng. Des. & Material Fabr. I (S)	67100
Geometry-H	32500	Power, Energy & Trans Tech I (S)	68100
Algebra II	33200	Engineering I (S)	69000
Algebra II-H	33500	8	
Precalculus	35000	VISUAL & PERFORMING ART	ΓS
Precalculus-H	35500	Intro to Studio Art (S)	70000
		Studio I (S)	70100
SCIENCE		Ceramics (S)	70600
Integr. Physical, Earth & Life Sci	41700	Photography I (S)	71100
Integr. Physical, Earth & Life Sci-		Intro to Digital Art & Drawing	73000
<i>Ş</i> ,		Intro to Drama I (S)	73100
WORLD LANGUAGES		Intro to Drama II (S)	73200
French 1	51100	Public Speaking (S)	74000
French 2	51200	Symphonic Band	75000
German 1	52100	Wind Ensemble	75200
German 2	52200	Concert Orchestra	76000
Spanish 1	53100	Chamber Orchestra	76100
Spanish 2	53200	Concert Choir	77000
Latin 1	55100		
2	22100		
HEALTH/PHYSICAL EDUCAT	ΓΙΟN	ALTERNATE ELECTIVES	
PE/Health 9	81000	ALTERNATE ELECTIVES	
		1	
STUDY HALL		1	
Study Hall (S1)	99100	•	
Study Hall (S2)	99200	2	
VO-TECH			
Vo-Tech AM	92100		
Vo-Tech PM	93200		

NOTES