

ENGLISH COURSES

English 9--Required for incoming freshman

In this year-long course students are introduced to the rigors of high school English. Students read a book of their choice during each of the 12 terms. They individually apply the reading strategies, writing techniques, and literary analysis skills they acquire in whole group lessons to their choice books. Major units of study include Greek Mythology and Homer's *Odyssey*; a creative writing unit in Epic Writing; a dramatic unit that includes a version of Charles Dickens masterpiece *A Christmas Carol*; a six week long, self directed research report; a spring poetry slam; and a speech unit. Throughout the year, students explore vocabulary through the musical hip-hop curriculum *Flocabulary* and continually work on grammar in Daily Oral Language. All units are tied to the common core standards.

10th Grade Literature:

This is a year-long course for 10th graders is designed to build on the skills acquired in 9th grade. This class is covers extensive literary terminology, vocabulary building, study skills, test taking strategies close reading, and public speaking. Students read from a variety of genres including short stories, historical fiction, drama, and poetry. Selections include *The Crucible*, *To Kill a Mockingbird*, *Romeo and Juliet*, and *The Great Gatsby*. In addition to the rigorous reading requirements, students will be expected to write a variety of essays based on the literature. All units in this course have been designed using the Common Core standards. This class is graded such that no student can earn less than a C. If a student does not earn a C, the grade will be an incomplete.

English 11

English 11 is a full-year required course for students in 11th grade. English 11 begins with a Short Story unit and emphasis on literary analysis. English 11 also features a poetry unit in which students write Haikus, Odes, Sonnets, Free Verse, and Spoken Word poetry. English 11 is traditionally an American Literature Survey course, but at MTS English 11 is more of a World Literature course. Key novels & readings include: *The Circuit*, the true story of a migrant child moving to the United States from Mexico, *American Born Chinese*, a graphic novel about what it means to "fit in" in America when you "look different," *Their Eyes Were Watching God*, a novel that takes place shortly after the civil war about a strong African American female defining herself in society, *A Long Way Gone*, Ishmael Beah's memoir of his life as a child soldier in war torn Sierra Leone, and *The Old Man and the Sea*, Ernest Hemingway's Pulitzer Prize winning novella about an 84-year-old fisherman's battle with a marlin, among others. The majority of the reading is done in class, either as a whole group, in small groups, or quietly solo. Students in English 11 are required to write a practice College Application Essay. English 11 also has a heavy focus on vocabulary, group dynamics, and "voice" in writing. English 11 is a reading strategies course featuring literature from around the world.

College Preparatory Writing

College Prep. Writing is a semester long elective course for 11th and 12th grade students who would like to become better writers prior to going off to college. In CPW students undertake a series of rigorous writing assignments including: College Application Resumes, College Application Essays, Friendly & Formal Letters, a Formal Research Paper, Literary Analysis, and a “How-To” Manual. College Prep. Writing also has weekly vocabulary lists of 10 words pulled from ACT and SAT prep lists. CPW has a heavy emphasis on grammar, punctuation, spelling, and the writing process as well as critical thinking and “writing under pressure.” This class is for students who are ready to put in some time and hard work to achieve a higher level of understanding of the process of writing and how it applies to college and life after high school. If you sign up and put in the hard work you will come out of CPW more knowledgeable about college in general and you will come out a better and more confident writer. Not to mention you will also have been exposed to a plethora of vocabulary words that will certainly help you with communication in life as well as on standardized tests. CPW is an English elective in which students will learn and practice MLA formatting, Works Cited pages, and citations in formal writing.

Journalism

Journalism is a semester long elective course for 11th and 12th graders interested in journalism, writing, and the news. Students in journalism are given composition notebooks for writing journal entries in. Students journal multiple times weekly on a variety of topics and sometimes “free write.” Journalism has a heavy focus on MLA formatting, Works Cited pages, citations in formal writing, and is largely focused on the writing process. Journalism also features an interview unit in which students practice how to interview someone for information and how to be interviewees themselves. Students in journalism evaluate the media and the news weekly. Most days begin with a warm-up called “Article of the Day,” which students read and discuss with their peers. Students in journalism write “Article Summaries,” practicing summarizing information and presenting it to an audience. Students in journalism investigate a current issue and report it to their class in the form of an “Investigative Report”. Students in journalism also write a report about a current and controversial topic. Journalism also focuses on the history of journalism, journalistic ethics, and the freedom of speech in America.

College In The Schools: Composition (First Semester)

MTS has college in the schools! That’s right, you can earn college credit and build your reading and writing skills in our building. The English department is proud to be working with Minneapolis Community and Technical College to bring our students 0900 and 1110 composition writing courses that will prepare them for success in higher education. Our goal is to aid students in independently reading and analyzing complex texts and in understanding and practicing writing various types of effective essays. Both course elements will help students learn the crucial life skill of knowing how to think-through solutions to difficult, meaningful problems as well as give them foundational college skills.

MATH COURSES

Intermediate Algebra

This course will focus on exponents, polynomials, linear programming, radical functions and quadratic models. It will also include the study of data exploration and simple probability.

Geometry

Prerequisite: Intermediate Algebra

Note: Students may be placed in their Geometry section based on standardized test data, performance in prior courses and teacher recommendation.

Geometry in two and three dimensions is studied through investigation and conjecture. Topics include properties of parallel lines and polygons, symmetry, transformations, congruence, similarity, Pythagorean Theorem, area, volume, right triangle trigonometry and circles.

Algebra 2

Prerequisite: Geometry or concurrent enrollment in Geometry

Note: Students may be placed in their Algebra 2 section based on standardized test data, performance in prior courses and teacher recommendation.

This course builds on students' Algebra skills. Topics include sequences and series, recursive formulas, quadratics and complex numbers, exponential models, families of functions, transformations, polynomials, rational expressions and exponents and probability.

Pre-Calculus

Prerequisite: Algebra 2

This course is designed for college-bound students interested in pursuing advanced mathematics or related fields. Topics include functions (linear, quadratic, power, exponential, logarithmic, rational), triangle trigonometry, unit circle trigonometry, analytic trigonometry, vectors and matrices

Calculus

Prerequisite: Pre-Calculus

Topics include functions and graphing, limits, continuity, differentiation, integration, the Fundamental Theorem of Calculus, differential equations, and applications.

SOCIAL STUDIES COURSES

World Geography

We study the 5 themes of geography as they pertain to each region of the world. Specific focus is placed on the environmental impact of humans in each region and using GIS to locate areas of the world.

Economics

This is a practical approach to the study of economics. Emphasis is placed on real world applications of credit finance and budgeting. The latter part of the class is focused primarily on Supply / Demand, Business, Market Structures and our government's Macroeconomic Policies.

Civics

This course describes the organization and operation of government on the local, state, and national levels. Students will be exposed to the major ideas, protections, privileges, structures, and economic systems that affect the life of a citizen in the United States political system. Students will also be able to identify some of the challenges in United States foreign policy and other issues facing Americans as well as understand their role (rights and responsibilities) as citizens at all levels of government and in the world today.

World History

The focus of this course is the study of the historical development of people, places, and patterns of life from ancient times until 1500 AD. Students will use skills of historical and geographical analysis to explore the early history of the world. All students take the SOL test for World History and Geography to 1500 AD.

US History I

This required course traces the history of the United States from the arrival of the first Americans through the end of the 19th Century. It introduces the themes of balance between unity and diversity, the shaping of democracy, the search for opportunity, and the influence of geographical factors. It also examines European, Native American, and African interaction in Colonial America, the Revolution, the New Nation, the Constitution, the War of 1812, the development of democracy, the West, slavery, the Civil War, Reconstruction, and Industrialization.

US History II

In this course, we will examine history through multiple perspectives and viewpoints that meet the Minnesota Academic Standards in History and Social Studies. The class covers the history of the United States from 1865 to the present and includes such topics as the Civil War, Reconstruction, westward expansion of the 19th century, immigration, racial segregation, the changing dynamics of politics in the 19th century, and much more. We will also study the cause and consequences of WWI, the Great Depression and World War II, and the post war state of the

U.S. from 1945-1972. Additionally, we will explore the movements of the 1970's, Civil Rights, the Vietnam War and many other historical events that took place from 1970 to the present that shaped our history.

SCIENCE COURSES

Biology

Biology is a year-long laboratory course that studies nature of science/ engineering, chemistry of life, cells, genetics/DNA, evolution, ecology, cycling of matter, flow of energy, organ systems, disease & human body and the history and nature of science. Students investigate various problems and study current issues through laboratory activities, scientific inquiry and projects and independent work. It is designed to be taken in 10th grade. Physical science is the prerequisite course for biology.

Standards and Benchmarks:

The standards addressed in this course are the Minnesota Academic Science Standards for 9-12 Biology and Selected Nature of Science and Engineering Standards.

PHYSICAL SCIENCE

The course is a one year course. The course incorporates concepts from the national science education standards with a variety of teaching strategies, hands-on-experience and technology in the classroom to help students explore and comprehend new concepts in Physical Science aligned with Minnesota Academic Standards in science with STEM INTEGRATION. During the STEM project, students will get involved in a Robotics program through an organization called FIRST. The course has been developed to stress content mastery and skills development and to accommodate the varied levels of students and their science background. Under the course, more group activities and thought-provoking, higher order questions will be used to stimulate thinking and to challenge the creativity of the students. The course emphasized inquiry-based and involved research projects.

ENVIRONMENTAL SCIENCE

The course is a semester course. Students will use Technology in the classroom to explore and study Earth and its environment aligned with Minnesota Academic standards in science with STEM INTEGRATION. During the STEM project, students will get involved in a Robotics program through an organization called FIRST. The course will be linked to the World Wide Web that students can use to extend their study of environmental science. As students work through this course, they will find a variety resources designed to provide support for understanding difficult concepts in environmental science. The course emphasized inquiry-based and involved research projects and field trip projects.

Chemistry

Prerequisites: Biology and Algebra 2

This course focuses on providing students with the basics for critical thinking and logic skills to prepare them to be successful in meeting state and national standards. The course content include the study of atomic structure, chemical bonding, reactions, mass relationships in reactions, gases, liquids, solids, solutions, acids and bases, kinetics and equilibrium, oxidation and reduction and organic chemistry. Students will be expected to use technology and hands on activities to practice recognizing concepts in context. Laboratory experiments will be used to reinforce topics studied from the text. Regular quizzes will be used to measure student's academic progress.

HEALTH and PHYSICAL EDUCATION

Health

This class is designed for incoming 9th graders and will cover topics including Mental Health, Violence Prevention, Nutrition, Sexual Health and Drug Education and Prevention.

Physical Education

This class is for 9th-12th graders and will focus will be on healthy decision-making, cardiovascular fitness, and skill development in various sport and lifetime leisure activities. Students will gain the knowledge to make informed healthy lifestyle decisions. Activities will improve strength, flexibility, and cardiovascular endurance.

ELECTIVES

The JROTC Program

The Army Junior Reserve Officer Training Corps (JROTC) is a program offered to high schools that teaches students character education, student achievement, wellness, leadership, and diversity. It is a cooperative effort between the Army and the high schools to produce successful students and citizens, while fostering in each school a more constructive and disciplined learning environment. The outcomes of the JROTC program are:

- Act with integrity and personal accountability as they lead others to succeed in a diverse and global workforce
- Engage civic and social concerns in the community, government, and society
- Graduate prepared to excel in post-secondary options and career pathways
- Make decisions that promote positive social, emotional, and physical health
- Value the role of the military and other service organizations

With the school's support, the JROTC program achieves these outcomes by using a world-class 21st Century, technology driven, student centered curriculum. The curriculum consists of

education in citizenship, leadership, social and communication skills, physical fitness and wellness, geography, and civics.

The curriculum is facilitated and taught by retired Army personnel. Qualified retired Army personnel are employed by the schools to teach the JROTC curriculum. JROTC teacher qualifications are based on military experience, maturity, stability, and leadership acquired over 20 years of service to our nation. To safeguard the viability of the JROTC program, the Department of Defense (DoD) and the Department of Education endorse the proposition that states recognize that JROTC instructors are certified to teach JROTC and the array of subject areas embedded (e.g., Physical Education, Health/Wellness, Civics, etc.).

JROTC is a successful program, making substantial contributions to students, schools, and communities which benefit greatly from its presence. The benefits of JROTC are reflected in metrics impacting all schools in the U.S.

	Average School	JROTC
Attendance	90.06%	93.48%
Graduation	86%	98%
In-Discipline	15%	5%
Drop-Out	3%	Less than 1%
GPA	2.68	2.9

Introduction to Photography

Introduction to photography is a course designed to train students how to use digital technology in the world of smartphones. Intro to Photography uses iPad technology and application as a medium exclusively. This class introduces students to the elements of art and principles of design needed for creating photographs; including rules of composition, editing techniques, shape, form, and the history of photography. Students also learn to examine images critically through peer and self critiques.

Introduction to Video

In this course students will study filmmaking techniques, understand the roles on a film crew, work with professional equipment, and industry standard software. Students will exclusively use ADOBE Premiere for non linear editing of their short videos. Assignments may include written work, visual work, video-production, audio production and editing. All three forms of production (Pre-Production, Production, and Post Production) will be stressed taking a project from beginning to end.

KEYBOARDING

This course is required for all ninth grade students and highly recommended for those who have not had formal instruction on keyboarding. In this course students will learn the proper technique to key all letters, numbers, and symbols found on the keyboard. In addition, students will learn the basic functions of Google Documents, Spreadsheets, Slideshows, and Websites. These basic skills are essential for success at MTS and the work force.

College & Careers:

In this course students will develop an understanding of the career planning process and the relationship between career planning and college. Students will improve their professional vocabulary and literacy while creating realistic goals. Course topics include: exploring career strengths, job application process, communication strategies, learning styles, creating goals, college application process, field visits, and financial planning.

Introduction to Computer Science:

In this course students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. Students will use MIT App Inventor and Python to create mobile apps that make a difference in people's lives. This course will empower students to develop computational thinking skills while building confidence that prepares them for more advanced computer science courses offered through Project Lead the Way.