Dr. Mona Jain Middle School

Course Description Guide

2024-2025

OVERVIEW

It is important for students to be enrolled in courses that will challenge them, but also allow for academic success. That balance is achieved by considering FAST scores, report card grades, work ethic, course pre-requisites and teacher recommendations.

Textbooks are purchased, the Master Schedule is created, and teachers are hired based on student registration in classes. Schedule changes are NOT made after the school year begins, unless there has been a clerical error, or a student has been misplaced. Students and parents need to carefully select classes based on course descriptions, teacher recommendation and counselor advice.

We make every effort to honor students' elective choices, but Class Size Amendment which limits the number of students in core courses does have an effect on our master schedule This may mean that it is not possible to balance classes and give all students their first or second choice of electives. Students with below proficiency FAST scores will be in remediation classes instead of electives.

Teacher recommendations for the level of classes are important because the teacher observes the student's work ethic, organizational skills, and maturity. Advanced and honors classes require extra time and commitment on the part of the student.

ADVANCED/HONORS CLASSES

Advanced and honors courses have several FAST and course pre-requisites and have an expectation of considerable homework, class participation, good behavior & attitude, required outside projects, and outside-of-class preparation.

High school classes have higher FAST pre-requisites, an expectation of nightly homework to include projects, and expectations of good behavior & attitude. Comprehensive semester exams comprise at least 20% of the semester report card grade. Students must pass a state End-of-Course Exam in math classes to receive credit for the class, regardless of grades.

Dual enrollment classes establish the student's high school Grade Point Average (GPA) and will appear on high school transcripts. Students and parents should discuss the number of dual enrollment classes a student can handle at one time because of the daily out-of-class-time required to prepare for these classes. Grades of an A or B in Dual Enrollment courses indicate success. A "C" average means the student would carry a 2.0 GPA on the high school transcript. Students earning a quarter grade of D or F will be removed from the class.

LANGUAGE ARTS

Language Arts 6 This course defines what students should understand and be able to do by the end of 6th grade. Knowledge acquisition should be the primary purpose of any reading approach as the systematic building of a wide range of knowledge across domains is a prerequisite to higher literacy. At this grade level, students are building their facility with rhetoric, the craft of using language in writing and speaking, using classic literature, essays, and speeches as mentor texts.
The benchmarks in this course are mastery goals that students are expected to attain by the end of the year. To build mastery, students will continue to review and apply earlier grade-level benchmarks and expectations.

Language Arts 7 This course defines what students should understand and be able to do by the end of 7th grade. Knowledge acquisition should be the primary purpose of any reading approach as the systematic building of a wide range of knowledge across domains is a prerequisite to higher literacy. At this grade level, students are building their facility with rhetoric, the craft of using language in writing and speaking, using classic literature, essays, and speeches as mentor texts.
The benchmarks in this course are mastery goals that students are expected to attain by the end of the year. To build mastery, students will continue to review and apply earlier grade-level benchmarks and expectations.

Language Arts 8 This course defines what students should understand and be able to do by the end of 8th grade. Knowledge acquisition should be the primary purpose of any reading approach as the systematic building of a wide range of knowledge across domains is a prerequisite to higher literacy. At this grade level, students are building their facility with rhetoric, the craft of using language in writing and speaking, using classic literature, essays, and speeches as mentor texts.
The benchmarks in this course are mastery goals that students are expected to attain by the end of the year. To build mastery, students will continue to review and apply earlier grade-level benchmarks and expectations.

Advanced Language Arts 6, 7, or 8 This course defines what students should understand and be able to do by the end of the grade level. Knowledge acquisition should be the primary purpose of any reading approach. The systematic building of a wide range of knowledge across domains is a prerequisite to higher literacy. At this grade level, students are building their facility with rhetoric, the craft of using language in writing and speaking, using classic literature, essays, and speeches as mentor texts.
*** Students will be placed based on the requirements in the Student Progression Plan

Pre-AP English 1 This course focuses on reading, writing, and language skills that are relevant to students' current work and essential for students' future to future high school and college coursework. Texts take center stage, preparing students for close, critical reading and analytical writing. The course trains readers to observe small details in a text to arrive at a deeper understanding of the whole. It also trains writers to create complex sentences—building this foundational skill enroute to sophisticated, longer-form analyses.
*** Students will be placed based on the requirements in the Student Progression Plan

MATHEMATICS

Foundational Math 6, 7, or 8 This course covers the same material as regular math but provides extra remediation for students who scored below proficiency on the FAST Math the prior year.

Mathematics 6 In Grade 6 Mathematics, instructional time will emphasize five areas: (1) performing all four operations with integers, positive decimals and positive fractions with procedural fluency; (2) exploring and applying concepts of ratios, rates and percent to solve problems; (3) creating, interpreting and using expressions and equations; (4) extending geometric reasoning to plotting points on the coordinate plane, area and volume of geometric figures and (5) extending understanding of statistical thinking. Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills.

Accelerated Mathematics 6 In Grade 6 Accelerated Mathematics, instructional time will emphasize five areas: (1) performing all four operations with rational numbers with procedural fluency; (2) exploring and applying concepts of ratios, rates, percent and proportions to solve problems; (3) creating, interpreting and using expressions, equations and inequalities; (4) extending geometric reasoning to plotting points on the coordinate plane, area and volume of geometric figures and (5) extending understanding of statistical thinking to represent and compare categorical and numerical data. Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills.
*** Students will be placed based on the requirements in the Student Progression Plan

Mathematics 7 In Grade 7 Mathematics, instructional time will emphasize five areas: (1) recognizing that fractions, decimals and percentages are different representations of rational numbers and performing all four operations with rational numbers with procedural fluency; (2) creating equivalent expressions and solving equations and inequalities; (3) developing understanding of and applying proportional relationships in two variables; (4) extending analysis of two- and three-dimensional figures to include circles and cylinders and (5) representing and comparing categorical and numerical data and developing understanding of probability. Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills.

Accelerated Math 7 In Grade 7 Accelerated Mathematics, instructional time will emphasize six areas: (1) representing numbers in scientific notation and extending the set of numbers to the system of real numbers, which includes irrational numbers; (2) generating equivalent numeric and algebraic expressions including using the Laws of Exponents; (3) creating and reasoning about linear relationships including modeling an association in bivariate data with a linear equation; (4) solving linear equations, inequalities and systems of linear equations; (5) developing an understanding of the concept of a function and (6) analyzing two-dimensional figures, particularly triangles, using distance, angle and applying the Pythagorean Theorem. Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills.
*** Students will be placed based on the requirements in the Student Progression Plan

Pre-Algebra In Grade 8 Mathematics: Pre-Algebra, instructional time will emphasize six areas: (1) representing numbers in scientific notation and extending the set of numbers to the system of real numbers, which includes irrational numbers; (2) generate equivalent numeric and algebraic expressions including using the Laws of Exponents; (3) creating and reasoning about linear relationships including modeling an association in bivariate data with a linear equation; (4) solving linear equations, inequalities and systems of linear equations; (5) developing an understanding of the concept of a function and (6) analyzing two-dimensional figures, particularly triangles, using distance, angle and applying the Pythagorean Theorem. Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills.

Algebra I Honors This course meets high school dual enrollment credit requirements. Students must complete and demonstrate mastery of the material covered in advanced 7th grade math and have earned a 3, 4 or 5 on the most current FAST Mathematics. In Algebra 1 Honors, instructional time will emphasize five areas: (1) performing operations with polynomials and radicals, and extending the Laws of Exponents to include rational exponents; (2) extending understanding of functions to linear, quadratic and exponential functions and using them to model and analyze real-world relationships; (3) solving quadratic equations in one variable and systems of linear equations and inequalities in two variables; (4) building functions, identifying their key features and representing them in various ways and (5) representing and interpreting categorical and numerical data with one and two variables. Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills.
Students are required to take the same cumulative semester exams that are given in high school, counting at least 20 percent of the semester grade. 7th grade students may qualify for this course by taking and scoring at least a high 8 on the IOWA Test as a 6 grader, along with a minimum grade of an A in Accelerated 6th Math and teacher recommendation.
*** Students will be placed based on the requirements in the Student Progression Plan

Geometry Honors This is a high school dual enrollment course that will be on the high school transcript. The primary objective is to teach students how to reason mathematically through visualization, analysis, and deductive reasoning. Proficiency with geometric skills is developed and applied to the understanding of geometric concepts. In Geometry Honors, instructional time will emphasize five areas: (1) proving and applying relationships and theorems involving two-dimensional figures using Euclidean geometry and coordinate geometry; (2) establishing congruence and similarity using criteria from Euclidean geometry and using rigid transformations; (3) extending knowledge of geometric measurement to two-dimensional figures and three-dimensional figures; (4) creating and applying equations of circles in the coordinate plane and (5) developing an understanding of right triangle trigonometry. Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills. Pre-requisites are a recommendation from the algebra teacher and a grade of 85 % or better in Algebra I Honors.
*** Students will be placed based on the requirements in the Student Progression Plan

SCIENCE

Science 6 This course studies general concepts, theories, and processes relating to these core questions: How do we learn about our world and ourselves? What are the parts of living things and how do they work? Why do some parts of our world change while others stay the same? How do natural forces affect our lives? How can we use models to learn about our world? The content includes scientific method, laws and theories, cell structure and function, organization levels, body systems, classification, Earth structures, weathering and erosion, energy, weather, and force and motion.

Science 7 This course studies general concepts, theories, and processes relating to these core questions: In what ways do living things interact with each other and the environment? Why does the Earth change over time? How does energy move in the environment? What is our role on Earth? The content includes the scientific method, environmental organization, food chains and webs, ecosystems, resource conservation, rock cycle, fossils, evolution, endangered and extinct species, genetics and heredity, continental drift, plate tectonics, and energy and waves.

Science 8 This course studies general concepts, theories and processes relating to these core questions: How are science and technology used to solve problems and improve our way of life? How are objects in the universe organized? What does the structure of an object tell us about how it works? Why are both stability and change necessary for sustaining life? Content includes the scientific method, seasonal changes, lunar phases, sun and planets, space exploration, electromagnetic spectrum, matter, atoms, periodic table, acids and bases, chemical reactions, and cellular respiration. At the end of this course students are required to take the SSA Science Exam, which covers standards from 6th – 8th grades.

Advanced Science 6, 7 or 8 Designed for the highly motivated above-average student who can read and work independently outside of class to prepare. Requires more homework and out-of-class reading. Advanced students need to demonstrate time management and multi-tasking skills.
*** Students will be placed based on the requirements in the Student Progression Plan

SOCIAL STUDIES

World History This course focuses on the development of the world community within the context of history by examining connections to the past to prepare for the future as participating members of a global society. Students will use knowledge of history, geography, economics, political processes, religion, ethics, diverse cultures, and humanities to solve problems in academic, civic, and social and employment settings.

Advanced World History Designed for the highly motivated student who can read and work independently outside of class.
*** Students will be placed based on the requirements in the Student Progression Plan

Civics This state-required course provides a study of the foundations of government and what it means to enjoy the freedoms and liberty that a democracy provides its citizens. The coursework also integrated economics, and geography. To be promoted from middle school, students must pass this course and take End-of Course Exam that will reflect 30% of their final grade.

Advanced Civics Designed for the highly motivated student who can read and work independently outside of class.
*** Students will be placed based on the requirements in the Student Progression Plan

United States History The purpose of this course is to enable students to understand the development of the United States within the context of history by examining connections to the past to prepare for the future as participating members of a democratic society. Students will use knowledge pertaining to history, geography, economics, political processes, religion, ethics, diverse cultures, and humanities to solve problems in academic, civic, social, and employment settings. A Career Planning component will also be taught, per district requirement.

Advanced United States History Designed for the highly motivated student who has teacher recommendation and can read and work independently. A Career Planning component will also be taught, per district requirement.
*** Students will be placed based on the requirements in the Student Progression Plan

Pre-AP World History and Geography The Pre-AP World History and Geography areas of focus prioritize the skills fundamental to the study of history and geography in high school, AP, and beyond. This gives students multiple opportunities to think and work like historians and geographers as they develop and strengthen these disciplinary reasoning skills throughout their education in history and the social sciences. These themes are interwoven throughout all units: Humans and the environment, Governance, Economic systems, Culture, and Society.
*** Students will be placed based on the requirements in the Student Progression Plan

ELECTIVES

AGRICULTURE

Agriculture I The agricultural program is a fun hands-on course that offers an opportunity for students to learn about the endless possibilities in the world of agriculture. Students will be exposed to the many areas of agriculture such as wildlife, aquaculture, small animals, career explorations, dairy products, greenhouse plant management, landscaping, beef cattle, leadership, and food safety.

ART

Studio Art 1 Students explore media and techniques used to create a variety of 2-D artworks through developing skills in drawing, painting, printmaking, and collage. Students practice, sketch, and manipulate the structural elements of art. Investigation of artworks from Western and non-Western cultures provide a means for students to expand their understanding and appreciation of the role of art in global culture. Student artists use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials.

Studio Art 2 Students refine techniques used to create a variety of two-dimensional (2-D) artworks through developing skills in drawing, painting, printmaking, and collage. Students manipulate the structural elements of art to promote creative risk-taking in 2-D artwork. Investigation of artworks from Western and non-Western cultures provides a means for students to expand their understanding and appreciation of the role of art in global culture. Student artists use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials. Prerequisite7 is Studio Art 1.

Studio Art 3 Students will be placed based on prerequisites and/or experience.

BAND

**All students may sign up for Beginning Band. Other bands require an audition and recommendation from the Band teacher.

Beginning Band This course is for students with no previous band experience. Students will choose from several different band Instruments. No previous music reading knowledge is necessary. Participation in performances beyond regular school hours is part of this course.

Band II This course is for any student who has successfully completed Beginning Band. Participation in performances beyond regular school hours is part of this course. Prerequisite is Beginning Band.

Band III This course is for any student who has successfully completed Band II, except for certain instruments by audition only (Drum, Piano, Bass, Guitar). Teacher approval is required.

CHORUS

Chorus I Students with little or no choral experience develop beginning vocal technique and skills, critical and creative thinking skills, and an appreciation of music from around the world and through time. Public performances may serve as a culmination of specific instructional goals. Participation in performances beyond regular school hours is part of this course.

Digital Technology

Digital Arts 1 - Fundamentals of Visual and Performing Arts Introduction to the Adobe Creative Cloud Software which will focus on familiarizing users with the image editing capabilities of Adobe Photoshop and the illustrative power of vector images in Adobe Illustrator. Students learn how to use different software interfaces and access its expansive set of features. Lessons cover the basics of the Principles of Design and the Elements of Art. When they complete this course, students will gain entry-level skills required for careers in the digital arts industry.

Digital Arts 2 - Introduction to Arts, A/V Technology and Communication Students will continue to refine skills used on Adobe Creative Cloud software. Class will be focused on creating a professional Graphic Design Studio environment. The content includes branding, package design, marketing, layout design, typography, and more. Students will also learn career readiness skills of collaboration, communication, decision making activities, critical thinking, and problem solving.

Digital Arts 3 - Introduction to Arts, A/V Technology and Communication and Career Planning *Students can earn an industry certification in this course.* Students will continue to refine skills used on Adobe Creative Cloud software and creating a professional environment. Students will study career paths and how their skills equip them to work in an extraordinarily diverse range of industries. Students will also study the history of art and design to understand how past design relates to present design styles. Students will also create school publications, such as the Yearbook and Magazines. Students will test for certifications in Adobe Photoshop and Adobe Illustrator.

ENGINEERING TECHNOLOGY

Engineering Technology I (Introduction to Technology) The purpose of this course is to give students an introduction to the areas of technology and to introduce students to the design and problem-solving processes using manipulative skills while working cooperatively with others in team activities. Students will learn how to build and use an Engineering Notebook, which will be used for the remainder of the course to document their activities, designs, projects, and observations. This is a hands-on course in which we work with computers, robots, circuits, 3D printers and much more.

Coding Fundamentals Coding fundamentals is a great follow-up course for students that have already passed Digital Discoveries. The purpose of this course is to assist Information Technology students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in the career cluster. The content includes but is not limited to foundational knowledge and skills related to computer coding and software development. Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

The Coding Fundamentals course will focus on virtual reality (VR), learning computer coding languages (JavaScript, HTML, Python, etc.), and software development.

Applied Engineering Technology 1 (high school class) The purpose of this high school level program is to provide students with a foundation of knowledge and technically oriented experiences in the study of applied engineering and its effect upon our lives and the choosing of an occupation. The content and activities will also include the study of entrepreneurship, safety, and leadership skills. This program focuses on transferable skills and stresses understanding and demonstration of the technological tools, machines, instruments, materials, processes and systems in business and industry.

Technology Student Association (TSA) TSA is the STEM-focused Career & Technical Student Organization. This class is the primary learning, building, and practicing environment for TSA Chapter members. Students in this class will be members of the Dr. Mona Jain TSA Chapter and represent Dr. Mona Jain in local, State and National competitions. The 37 events in TSA include challenges in electronics, structural engineering, mechanical engineering, robotics, coding, website design, career preparation, public speaking and much more! There is emphasis on developing and practicing leadership skills for all students in the class.

BUSINESS LEADERSHIP

Computer Applications in Business 1 This course is designed to provide instruction in intermediate keyboarding, intermediate word processing, intermediate electronic presentation, intermediate computer hardware, intermediate Internet, introductory spreadsheet, and business applications skills. These competencies provide the skills necessary to ensure increased productivity and efficient utilization of equipment.

Intro to Business Management and Administration Beginning with a broad overview of the Business Management and Administration career cluster, students are introduced to the terminology, careers, history, required skills, and technologies associated with each pathway in the Business Management and Administration career cluster. Additionally, they will be provided with opportunities to acquire and demonstrate beginning leadership skills.

Intro to Business Management and Administration and Career Planning Beginning with a broad overview of the Business Management and Administration career cluster, students are introduced to the terminology, careers, history, required skills, and technologies associated with each pathway in the Business Management and Administration career cluster. Additionally, they will be provided with opportunities to acquire and demonstrate beginning leadership skills.

ORCHESTRA

Beginning Orchestra This course is for students with no previous string playing experience. Students will choose to play the violin, viola, cello, or bass. No previous music reading knowledge is necessary. Participation in performances beyond regular school hours is part of this course.

Orchestra II This course is for students who have completed Beginning Orchestra. The purpose of this course is to continue the development of playing skills and further general knowledge of related non-playing concepts. Participation in performances beyond the regular school hours is a required part of this course.

Orchestra III This course is for students who have successfully completed Orchestra I and II. This course is for eighth grade students with at least one year of string instruction. The purpose of this course is to continue to develop playing skills and related non-playing concepts. Advanced seventh grade string students may be placed in this performing group with teacher approval. Participation in performances beyond regular school hours is a required part of this course.

PHYSICAL EDUCATION

Physical Education This course explores the relationship between physical education and other disciplines, assessment of health-related fitness, fitness program design, components of fitness, evaluation of physical activities and fitness, maintaining and improving health-related fitness, and learning to play team and individual sports. Includes 7th- 8th graders in same class.

READING

Intensive Reading This course is required as remediation for those who need to increase reading skills. The purpose of this course is to develop and strengthen reading through the integration of reading, writing, listening, speaking, viewing, and critical thinking. Students scoring below proficiency on the prior year FAST are assigned.

SPANISH

Spanish I This is a high school dual enrollment course for seventh and eighth graders that affects a student's high school GPA. Students must have a Level 5 on FAST and recommendation of the current language arts teacher. Students begin to acquire proficiency in Spanish through a linguistic, communicative, and cultural approach to language learning. Emphasis is placed on the development of listening, speaking, reading, and writing skills and on acquisition of the fundamentals of applied grammar. Students must take a cumulative exam that counts for at least 20 percent of the semester grade.

*** Students will be placed based on the requirements in the Student Progression Plan

Spanish II This is a high school dual enrollment course for eighth graders that affects a student's high school GPA. Students must have successfully completed Spanish I. Students continue to develop their Spanish through a linguistic, communicative, and cultural approach to language learning. Emphasis is placed on the continuation of listening, speaking, reading, and writing skills and on furthering the fundamentals of applied grammar.
Students must take a cumulative exam that counts for at least 20 percent of the semester grade.
*** Students will be placed based on the requirements in the Student Progression Plan

STUDENT AIDE

Student Aide Open to 7th & 8th graders: This elective selects only those students who demonstrate excellent citizenship and work ethic. Serving as a student aide under proper guidance and conditions provides students with valuable training for future employment. Office aides work in the front office and Media Center to assist with student check in and out, clerical support for the front office, running errands in a professional manner, answering the phone and directing calls to the appropriate secretary, answering student questions, directing students to proper office areas, answering visitor questions, and assisting new students with a campus tour and finding their classes.

TV PRODUCTION

TV Production Students will produce the daily television newscast and learn how to create, direct, produce and be the on-air talent. The class will also do special video, web, and audio productions throughout the year for the school and various projects. Students may also participate in TV production contests and competitions with their projects.

YEARBOOK

Yearbook Production This course is open to seventh and eighth grade students who have already taken computer courses and have been selected through an application process and teacher recommendation. Using the Adobe Creative Cloud, cameras, and other great programs, students will market, sell, create, and distribute the yearbook.

Leadership

Peer Counseling Leadership/peer counseling is a year-long elective for 7th and 8th grade students. The class content will focus on promoting scholarships, leadership skills, and service learning for each student. Our curriculum is rigorous and focused, with a strong emphasis placed on community involvement, volunteerism, and leadership.