

2023-2024

McMillan Magnet Center



8th Grade Course Directory



Monarchs Get Ready to Roar!!!



McMillan Magnet Center

Math, Technology and Engineering

McMillan Mission and Vision

The Mission of McMillan Magnet Center is to academically challenge students and to promote student ownership of learning in a safe, diverse, and respectful environment.

The Vision of McMillan Magnet Center is to:

- Collaborate with school, family, and community-based partners.
- Provide an innovative, project-based, cross-curricular school setting.
- Integrate components of Science, Technology, Engineering, Arts, and Math through Project Lead the Way (PLTW).

This directory is designed to help you in planning a program of study that will best meet your needs and interests. Parents, teachers, and counselors will help you select and make decisions regarding courses for your student schedule.

Your directory contains complete information about course requirements and materials needed, as well as descriptions of each course being offered at McMillan. Read and study the course offerings before registering. Course choices become commitments and it is difficult to make changes. Careful consideration now will help assure you of a program that satisfies your needs and interests.

The magnet center curriculum is designed to encourage exploration in a variety of subject areas. The curriculum at McMillan Magnet Center reflects the infusion of multicultural nonsexist educational material consistent with the philosophy adopted by the Board of Education.

We hope this directory will be an effective tool in selecting your plan of study. The courses you select in middle school are most important to your future goals and endeavors.

Dr. Andrew Walters
Principal

Mrs. Kim Langford
Assistant Principal

Mr. Alex Curran
Assistant Principal

Mrs. Sarah Castanos
Dean of Students

Dr. Matthew Coffey
Dean of Students

Visit our website at <http://www.mcmillan.ops.org>

Program Planning Worksheets

Before registration, carefully review the program of study and course descriptions in this handbook and plan a program with your counselor and parents. The sequence of required courses has been outlined on the worksheet provided on this page. You will want to add the elective courses you choose.

The example below is what a schedule could look like at McMillan:

Period	A Day	Period	B Day
1 2 Block 1	ELA <ul style="list-style-type: none"> • ELA 6 or Honors ELA 6 • ELA 7 or Honors ELA 7 ELA 8 or Honors ELA 8	1 2 Block 1	Math <ul style="list-style-type: none"> • Math 6 or Advanced Math 6 • Math 7 or Advanced Math 7 • Math 8 or Honors Algebra 1-2 H Geometry 1-2 (possibly offered off site)
Advisory	30 minutes every day	Advisory	30 minutes every day
3 4 Block 2	Science <ul style="list-style-type: none"> • Science 6 • Science 7 or Honors Science 7 • Science 8 or • Honors Physical Science 1-2 	3 4 Block 2	Social Studies <ul style="list-style-type: none"> • Social Studies 6 • Social Studies 7 • Social Studies 8
5 6 Block 3	Semester or Yearlong Elective	5 6 Block 3	Semester or Yearlong Elective
7 8 Block 4	Physical Education/Human Growth Development <ul style="list-style-type: none"> • PE 6 • PE 7 • PE 8 Intro to College & Careers 6,7,8	7 8 Block 4	Chorus/Band/Orchestra <ul style="list-style-type: none"> • Yearlong every other day • If not in Chorus/Band/Orchestra, then semester or yearlong elective

EIGHTH GRADE ELECTIVE COURSE DESCRIPTIONS

REQUIRED ELECTIVE COURSE DESCRIPTIONS

Physical Education/ Human Growth & Development 8

Length: Year Long

This course is designed to include a wide variety of sporting activities and teach the qualities of sportsmanship, competition and fitness. It includes learning the rules and regulations for the major sports of volleyball, wrestling, basketball, soccer, and track and field events. Students also participate in a variety of leisure and lifetime activities including badminton, aerobics and more. Students must wear appropriate attire for physical education courses (tennis shoes, T-shirts, sweats or shorts, etc.). Although the physical education locker rooms have showers available for students use; students are not required to shower for class. This course will use current Physical Education standards and Human Growth and Development pacing.

Intro to College & Careers 8

Length: Year Long

Students will be using previous career exploration around the Nebraska Career Education Model and their understanding of the Nebraska Career Readiness Standards to complete independent and collaborative projects aligned with their aptitudes and interests. Additional opportunities for career readiness skill development will be incorporated. Students will review and add to their Personal Learning Plan to demonstrate personal responsibility for career preparation. Prerequisites: None

ELECTIVE COURSE DESCRIPTIONS

Students select elective courses to fill their remaining schedule. They may choose 3 full year electives, 6 semester electives or a combination of full year electives, and one semester electives totaling 6 semesters.

Honors Special Project 8

Length: Year long

Teacher Recommendation

This course offers a wide variety of experiences that align with gifted and talented programming standards. Learning opportunities meet grade level objectives in problem-solving, critical thinking, creative thinking, inquiry, cultural proficiency, metacognition, and affective skills.

Spanish 1-2

Length: All Year

Teacher Recommendation

This course in World Languages at the first-year level stresses interpretive, presentational, and interpersonal communication abilities to develop survival skills in the target language. Students become aware of the personal and economic opportunities that knowing a second language will bring them and how that knowledge will enable them to function better both in the United States and globally. They also begin to develop an awareness and appreciation of the various cultures associated with that language as well as the impact these cultures have made on their own community, country, and world.

Middle School Service Learning

Length: One semester

This course is a hands-on study of the practice and intent of service learning, the integration of community service, and related academic study. Students will spend one semester actively developing, planning, implementing, and evaluating service-learning experience. Principles of civic engagement will be added to provide students with a well-rounded learning experience.

Music Technology 1**Length: One Semester**

This course is designed for students interested in music and its related computer applications. No previous experience in computers or music is necessary. Students will explore electronic musical instruments, computer-assisted instructions, MIDI sequencing and music notation.

Art 8**Length: One semester**

This course allows students to be innovative and reflect on their own experiences as many American artists have and do today. American artists were and are on the forefront of shaping America's identity through recording the human experience in innovative ways. Throughout this course, students will continue to develop their artistic voice and style and explore how they do and will play a part in society. Students will examine art and artists throughout American history focusing on America's diversity and influence. Aesthetic theories of Instrumentalism, Expressionism and Formalism will be studied as well.

Journalism 8**Length: One semester**

The course will provide students with the opportunity to further develop skills editing, and all aspects of producing information. Students will create and edit graphics, sound, and special effects to be incorporated into final projects. Students will be required to work independently and in small teams. Students will create storyboards, write and rewrite, record, and edit projects.

Beginning Guitar**Length: One semester**

This course is an introductory and beginning course in acoustic guitar for middle school students. The class will focus heavily on guitar in which the student will learn to play melodies and chords. Course materials will be adapted to student advancement. Guitars are provided.

Jobs for Americas Graduates (JAG)**Length: Year long**

Jobs for America's Graduates (JAG) is a graduation enhancement program focusing on personal and career development and future readiness. The class will participate in a variety of classroom activities, assignments, exploration, guest speakers, mentorship, and guidance. Each member will become part of a student leadership organization and have several opportunities to further unlock and enhance their potential. This is the middle-level experience/course that students would be enrolled into prior to high school. ***Parent Permission required.***

Reading Skills 8A**Teacher Recommendation****Length: Year long**

This course is designed for readers who have a foundation in decoding skills but experience difficulty comprehending grade-level material. The curriculum focuses on strengthening fluency, comprehension, and vocabulary skills. Placement is based on standardized test scores and teacher recommendation.

Reading Skills 8B**Teacher Recommendation****Length: Year long**

Students in this course will improve reading proficiency with explicit, direct instruction in fluency, vocabulary, and comprehension. Strategies for phonemic awareness and phonics will be taught as needed. Students will read leveled, high interest literature for both academic and recreational purposes. Placement is based on standardized test scores and teacher recommendation.

NOTE: Enrollment in any music class requires mandatory participation in our concerts, which are held in the evening each semester in our auditorium. Additional performances may be scheduled.

Chorus 8

Length: One semester

Chorus 8 is available to eighth grade students who have special interests and abilities in choral singing. Choral music is introduced in two and three parts that include bass clef participation. Vocal emphasis is placed on the introduction of the male changing voice and greater extension of all voice ranges. Performance opportunities including the All-City Music Festival are an extension of the classroom experience.

Advanced Band 8

Length: All year

Teacher Recommendation

Materials Needed: Instrument

This course is offered to eighth grade students with advanced abilities secured through several years of instrumental music participation. Music introduced includes technique studies and selected concert music with full instrumentation appropriate to the classes and ability. Membership is achieved by the recommendation of the instructor. Performance is included as an extension of the classroom activities.

Advanced Strings 8

Length: All year

Teacher Recommendation

Materials Needed: Instrument

This course is offered to eighth grade students who have demonstrated advanced ability in playing a string instrument. Technique studies and selected concert music advance both technical and musical understandings. The instrumentation includes violin, viola, cello, and string bass. Membership is achieved by the recommendation of the instructor or successful completion of Intermediate Strings. Performance is included as an extension of the classroom activities outside of the school day.

EIGHTH GRADE MAGNET ELECTIVE COURSE DESCRIPTIONS

Enrichment Math 1 and Enrichment Math 2

Length: One Semester each

Teacher Recommendation

This course is designed to prepare 7th and 8th grade students for mathematics competitions. Offered 2nd semester, students will prepare for the MATHCOUNTS competition and a national on-line competition. The focus first semester is on problem solving and mathematical explorations. Students will work on material that supersedes any coursework available to middle school students. Students will be required to complete projects to earn credit for the course.

PLTW Medical Detectives

Length: One Semester

Medical Detectives (MD) explores the biomedical sciences through hands-on projects and labs that require students to solve a variety of medical mysteries. Students investigate medical careers, vital signs, diagnosis, and treatment of diseases, as well as human body systems such as the nervous system. Genetic testing for hereditary diseases and DNA crime scene analysis put the students in the place of real-life medical detectives.

PLTW Energy and the Environment

Length: One semester

Students are challenged to think big and toward the future as they explore sustainable solutions to our energy needs and investigate the impact of energy on our lives and the world. They design and model alternative energy sources and evaluate options for reducing energy consumption.

PLTW Flight and Space**Length: One Semester**

The exciting world of aerospace comes alive through Flight and Space. Students explore the science behind aeronautics and use their knowledge to design, build, and test an airfoil. Custom-built simulation software allows students to experience space travel.

PLTW Introduction to Computer Science I**Length: One semester**

Designed to be the first computer science course for students who have never programmed before, Introduction to Computer Science 1 (ICS-1) is the starting point for the PLTW Computer Science program. Students work individually and in teams to create simple apps for mobile devices using MIT App Inventor®. Students explore the impact of computing in society and the application of computing across career paths and build skills and awareness in digital citizenship and cybersecurity. Students model, simulate, and analyze data about themselves and their interests. Pre-requisite: must have taken and passed PLTW CS APP Creators with a C or better.

Intro to Architecture**Length: One Semester**

This pre-engineering course is an introduction to architecture, sketching skills, and drafting tools. Students will learn about the process of architecture, different architectural styles, as well as, careers associated with architecture and computer-aided design. Students will create virtual three-dimensional models of homes by learning to use computer-aided design and drafting (CADD) software. Students will work together to build a scaled, physical model of a home. This course is recommended for pre-engineering (PLTW) students or any student interested in applied mathematics and engineering.

PLTW Green Architecture**Length: One Semester**

In a world of reduced resources and environmental changes, it is important to present the concept of “being green” to the next generation of designers and builders. In this unit, students are introduced to architectural plans, construction styles, alternative materials and processes, dimensioning, measuring and architectural sustainability. Students use a 3D architectural software program to create an environmentally friendly home using shipping containers. Pre-requisite: must have taken Introduction to Architecture

PLTW Automation & Robotics**Length: One semester**

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

PLTW Design & Modeling**Length: One Semester**

Students discover the design process and develop an understanding of the influence of creativity and innovation in their lives. Students using freehand sketching techniques and descriptive geometry, learn how to sketch components of a design in different views and create three-dimensional computer models. Using design briefs or abstracts, students create physical models and documentation to solve real-world problems.

Course Placement Appeals

All Secondary Omaha Public Schools offer procedures for appealing course placement (i.e., AP, Honors, IB, etc.). Each building may have specific forms and deadlines; however, the following general procedures shall apply:

Level One: Counselor, Curriculum Specialist, Assistant Principal/Data, or Principal

A student or parent with a course placement appeal may first discuss the matter with the counselor, or building administrator involved, with the object of resolving the matter informally.

Level Two: Assistant Superintendent of Curriculum, Instruction and Assessment

If the course placement appeal is not resolved at Level One and the individual still wishes to pursue the appeal, he/she may formalize the appeal in writing addressed to the Assistant Superintendent of Curriculum, Instruction and Assessment at 3215 Cuming Street, Omaha, NE 68131.

Level Three: Superintendent

If the appeal is not resolved at Level Two and the individual still wishes to pursue the appeal, he/she may formalize the appeal to the superintendent of schools after receiving a written response from the Assistant Superintendent of Curriculum, Instruction and Assessment.

These steps shall be taken in a timely manner to accommodate the registration of courses for the school year in question.

Omaha Public Schools does not discriminate on the basis of race, color, national origin, religion, sex (including pregnancy), marital status, sexual orientation, disability, age, genetic information, gender identity, gender expression, citizenship status, veteran status, political affiliation or economic status in its programs, activities and employment and provides equal access to the Boy Scouts and other designated youth groups. The following individual has been designated to accept allegations regarding non-discrimination policies: Superintendent of Schools, 3215 Cuming Street, Omaha, NE 68131 (531-299-9822). The following persons have been designated to handle inquiries regarding the non-discrimination policies: Director of Equity and Diversity (equityanddiversity@ops.org), 3215 Cuming St, Omaha, NE 68131 (531-299-0307).