

Northwestern Middle School

Course Selection Book



2020-2021



NORTHWESTERN MIDDLE SCHOOL
6TH GRADE COURSE SELECTION INFORMATION 2020-2021

All 6th grade students will take the following courses, which are required: Language Arts, Social Studies, Science, Math, Computer, Extra Help, Physical Education (9 weeks), Art (9 weeks), Reading (9 weeks), and Intro to STEM (9 weeks). Students in 6th grade must also take a full year of Choir or Band. Students may have an RTI or Intervention course, as well as a course for Study Skills.

Please note that there may be advanced course offerings within each of the academic core classes. Advanced courses are designed to work on grade-level material; however, the pacing and depth of the material will be at an advanced level and at an accelerated pace. In order to be considered for advanced courses, several factors will be involved in the final decision, such as: student interest, assessment data, teacher recommendations, gifted and talented identification, and schedule availability. Please keep in mind that requests cannot always be granted for various reasons.

We also offer some courses focused on remediation and intervention, for students who may need additional supports in various academic subject areas. These courses will be determined using various data, as well as teacher recommendations. The goal for these classes are to provide students with additional time to work on academic skills, while also teaching study skills and test-taking strategies.

Extra Help is a structured study hall period. Core content teachers at each grade level are made available for students to seek assistance, ask questions, and/or utilize the time to complete make-up work or assignments. This period also serves as a time for various club meetings and activities, religious education, and Future Fridays.

Intervention and RTI Courses In addition to advanced options, we have courses that are tailored to our students who may need additional support in their academic subject areas. These courses are scheduled based on student need, academic information, assessment results, and teacher recommendations.

Computer 6 is a course that develops students' keyboarding skills. Student also become proficient in Google Docs, Slides, and Sheets, as well as Microsoft Word, PowerPoint, and Excel. Learning to organize files saved in various places is included in this course. State mandated internet safety is incorporated in the curriculum. Students also learn basic coding practices using a Micro.bit.

NORTHWESTERN MIDDLE SCHOOL
7TH GRADE COURSE SELECTION INFORMATION 2020-2021

As you complete scheduling paperwork, please refer to this document to help answer questions and guide your decision-making. Please note that course codes are listed for the courses, which are for office use only.

ACADEMIC CORE REQUIREMENTS

The following courses are REQUIRED for 7th grade: Language Arts, Science, Math, and World Studies. These courses run all year. Students will also be scheduled into an all-year Extra Help class, as well as, a semester each of Physical Education and Health. Students will also be required to complete a 9-week course called Financial Literacy.

Depending on student achievement and schedule availability, we may be offering some advanced course options for students who meet specific qualifications (i.e.: standardized test results, gifted and talented identification, classroom performance, STAR results, schedule placement, etc.). Please keep in mind that requests cannot always be granted for various reasons. If you would like your child to be considered for any of the advanced classes options, please check the appropriate boxes.

We also offer some courses focused on remediation and intervention, for students who may need additional supports in various academic subject areas. These courses will be determined using various data, as well as teacher recommendations. The goal for these classes are to provide students with additional time to work on academic skills, while also teaching study skills and test-taking strategies.

FINE ARTS

Students can meet their Fine Arts requirement towards graduation in grades 7 and/or 8 by taking the combination of a year's length of fine arts courses (i.e.: Band, Choir, and any Art classes in grades 7 and 8). It is recommended that students take a full-year music course in grades 7 or 8, which can be either Band or Choir; however, students can opt to take Art courses to fulfill this requirement, as well.

ELECTIVES

Students have multiple elective options. All electives are subject to change depending on multiple factors (i.e.: staffing, request numbers, room availability, etc.). Students will be required to take Financial Literacy (quarter).

NORTHWESTERN MIDDLE SCHOOL

GRADE 7 COURSE DESCRIPTIONS 2020-2021

All 7th grade students will take the following courses, which are required: Language Arts, World Studies, Science, Math, Extra Help, Physical Education (semester), Health (semester), and Financial Literacy (9 weeks).

Please note that there may be advanced course offerings within each of the academic core classes. Advanced courses are designed to work on grade-level material; however, the pacing and depth of the material will be at an advanced level and at an accelerated pace. In order to be considered for advanced courses, several factors will be involved in the final decision, such as: student interest, assessment data, teacher recommendations, gifted and talented identification, and schedule availability.

Extra Help is a structured study hall period. Core content teachers at each grade level are made available for students to seek assistance, ask questions, and/or utilize the time to complete make-up work or assignments. This period also serves as a time for various club meetings and activities, religious education, and Future Fridays.

Intervention and RTI Courses In addition to advanced options, we have courses that are tailored to our students who may need additional support in their academic subject areas. These courses are scheduled based on student need, academic information, assessment results, and teacher recommendations.

Fine Arts Students can meet their Fine Arts requirement towards graduation in grades 7 and/or 8 by taking the combination of a year's length of fine arts courses (i.e.: Band, Choir, or Art course options).

Band (year-long) Band is a course that allows students to excel in instrumental music. Students will participate in instrumental performances throughout the year.

Choir (year-long) Choir is open to all students with a desire to excel in vocal music. Emphasis will be placed on the learning of a wide variety of music literature, basic vocal production, sight singing, and fundamental technical skills. Students will participate in performances throughout the year.

Elective Options

Ag Science 7 (quarter) What is Agriculture? How do we feed the world? Seventh grade students in the Ag Science 7 class will study a variety of topics related to agriculture. Students will take an in-depth look at the various parts of agriculture. Topics include plant/garden science and production, animal science and production, food processing and testing, and wildlife.

Art 7 (quarter) Seventh grade art will provide students with the opportunity to explore various visual art forms and techniques in a basic foundations class through the elements and principles of art and design. Students will be introduced to a variety of media through two-dimensional and three-dimensional approaches to creating and responding to visual arts.

BioScience (quarter) In this elective you will explore the different areas of biology and life science that lead into the 8th grade electives of medical detectives and zoology. This course is a fun, hands on lab class that will allow you to explore different areas, problems, and projects associated with preparing you for those future electives. Be ready to fall in love with the biosciences.

Coding & Game Design (quarter) The class introduces students to JavaScript coding using sites such as CodeCombat and Code.org. Micro.bit review and further exploration creating various devices in MakeCode is included.

Creative Writing (quarter) In this 9 weeks course, students will be encouraged to put their creativity to print with multiple writing opportunities. Students will review different types of written work and be encouraged to come up with their own works of literary art!

Energy and the Environment (quarter) 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 evaluation options for reducing energy consumption.

Exploring Spanish (quarter) In this 9-week elective class, you will be introduced to the language and culture of the Spanish-speaking world. You will learn about where Spanish is spoken, basic vocabulary (i.e.: colors, numbers, days, months, and seasons), and how to have simple conversations. Also, cultural celebrations and traditions will be studied on occasion.

Flight and Space (quarter) The exciting world of aerospace comes alive through Flight and Space. During this unit, student delve into the history of flight and space, discover the science behind aeronautics, and explore traveling and living in space. Students are then challenged to use their knowledge to design, build, and test various flying machines.

Printmaking (quarter) In printmaking, students will learn many different ways to reproduce their original artwork. Artist's today use prints as an economical way to sell their work without a heavy cost to the consumer, therefore getting their name out into the world quicker. The class will review stenciling, monoprints, digital prints, linocuts, intaglio, and many others. With these skills, the class will then discuss practical ways to apply these skills to create a small business.

Ready, Set, Act! (quarter) This innovative theater class allows students to practice social skills on and off the stage with their peers using acting methods taught in class. They will learn the basics for theater performances in order to eventually perform for their class. Students will also learn behind the stage etiquette including stage crew set-up, makeup, and set construction.

Robotics I (quarter) 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. This course will be taught to both 7th and 8th grade students, which may allow for combined classes.

Science and Society (quarter) Scientific advancements have helped shape society throughout the course of history. Trends in society have also shaped breakthroughs in various fields of science. Over the course of nine weeks, we would like to present 4-5 problems that people have faced, have students use the scientific method to hypothesize solutions to those problems, study the actual events that occurred as a result of the problem, and debate the ethics that surround those results.

Solar Sprint (quarter) Students will have the opportunity to explore the engineering design process, while designing their very own solar sprint cars. Students will engage in the brainstorming process, which will then lead to the construction of their design. Students will work collaboratively with peers through the process, ending the course with sprint car races to see which design worked the best!

NORTHWESTERN MIDDLE SCHOOL
8TH GRADE COURSE INFORMATION 2020-2021

As you complete scheduling paperwork, please refer to this document to help answer questions and guide your decision-making. Please note that course codes are listed for the courses, which are for office use only.

ACADEMIC CORE REQUIREMENTS

The following courses are REQUIRED for 8th grade: Language Arts, Science, Math (Pre-Algebra or Algebra I), and American History. These courses run all year. Algebra I is for H.S. credit and is an accelerated course for 8th grade students. Students will also be scheduled into an all-year Extra Help class. There are two required electives in 8th grade, which include Career Connections (quarter) and Physical Education (quarter).

Depending on student achievement and schedule availability, we may be offering some advanced course options for students who meet specific qualifications (i.e.: standardized test results, gifted and talented identification, classroom performance, STAR results, schedule placement, etc.). Please keep in mind that requests cannot always be granted for various reasons. If you would like your child to be considered for any of the Advanced classes options, please check the appropriate boxes.

We also offer some courses focused on remediation and intervention, for students who may need additional supports in various academic subject areas. These courses will be determined using various data, as well as teacher recommendations. The goal for these classes are to provide students with additional time to work on academic skills, while also teaching study skills and test-taking strategies.

FINE ARTS

Students can meet their Fine Arts requirement towards graduation in grades 7 and/or 8 by taking the combination of a year's length of fine arts courses (i.e.: Band, Choir, and any Art classes in grades 7 and 8). It is recommended that students take a full-year music course in grades 7 or 8, which can be either Band or Choir; however, students can opt to take Art courses to fulfill this requirement, as well.

ELECTIVES

Students have multiple elective options. All electives are subject to change depending on multiple factors (i.e.: staffing, request numbers, room availability, etc.). Students will be required to take Career Connections (quarter) and Physical Education (quarter).

HIGH SCHOOL CREDIT OPTIONS

As eighth grade students, there are multiple opportunities for students to earn high school credit. This means that the credit will transfer to the high school, counting towards their graduation

credits, as well as, their cumulative grade-point average (GPA). These high school options are marked in the course selection booklet. Students who decide to take courses for high school credit should be able to handle high school content and should also be aware that this will begin their high school GPA.

NORTHWESTERN MIDDLE SCHOOL

GRADE 8 COURSE DESCRIPTIONS 2020-2021

Please note that there may be advanced course offerings within each of the academic core classes. Advanced courses are designed to work on grade-level material; however, the pacing and depth of the material will be at an advanced level and at an accelerated pace. In order to be considered for advanced courses, several factors will be involved in the final decision, such as: student interest, assessment data, teacher recommendations, gifted and talented identification, and schedule availability.

Extra Help is a structured study hall period. Core content teachers at each grade level are made available for students to seek assistance, ask questions, and/or utilize the time to complete make-up work or assignments. This period also serves as a time for various club meetings and activities, religious education, and Future Fridays.

Intervention and RTI Courses In addition to advanced options, we have courses that are tailored to our students who may need additional support in their academic subject areas. These courses are scheduled based on student need, academic information, assessment results, and teacher recommendations.

Career Connections This is a mandatory course for all 8th grade students. In this course, students will analyze interests, aptitudes and skills to prepare for careers and transition through life. An emphasis will be placed on work ethics, team building, communication, and leadership skills. Additional topics will include work and technology etiquette, as well as, career planning.

Fine Arts Students can meet their Fine Arts requirement towards graduation in grades 7 and/or 8 by taking the combination of a year's length of fine arts courses (i.e.: Band, Choir, and/or Art courses).

9 Week Rotation Courses- Students have the opportunity to take two of the courses listed below:

Ag Science 8 Please note that Ag Science 7 is not required to take this class. This quarter class will focus on non-traditional parts of agriculture covered in the 7th grade class. We study hands-on topics such as landscaping, food science, aquaculture, and forestry science. Students will have the opportunity to be in the Greenhouse laboratory at the high school, depending on the growing season.

Art History This course is designed to explore various artists and their contribution to visual arts. Students will view and discuss various pieces of art, learn critique skills, and experiment with different materials and techniques, while learning the history associated with them. Students will develop a better understanding and appreciation for the visual arts through the analysis of others' work, as well as, their own individual creations.

Community Art Explore how art can influence a society through readings, class discussions, and by viewing large and small-scale community artwork examples from around the world. Students in this class will be challenged to work together to find ways to create and share art in their school and community. Students will identify an area that may benefit from the presence of art, both two-dimensional and/or three-dimensional, and will create their own design for the identified space.

Within this design process, students will have the opportunity to explore various art techniques and art media, while learning fundamental design components that will allow them to “see” and analyze art, while developing an appreciation of the influence that art has on the world.

Exploring Electricity Students will take this course in the HS Ag shop. This class will be a fast-paced study of the use of electricity, the atomic structure and flow of electricity, and learn safety procedures. Following the introductory portion of this class, students will work in groups to create electrical circuits commonly found in homes and public buildings. This class will focus largely on basic electrical work, but will also feature uses of electricity such as welding.

Grade 8 Electives- Students have two to three class periods open for electives. It is important to note that we prefer students to choose multiple electives to fill their schedules rather than study halls since all students are already given time each day to complete work during Extra Help. Please note that any class listed for high school credit may include additional course fees. In addition, students interested in taking courses for high school credit must be able to demonstrate that they are able to handle high school curriculum through their current grades and classroom performance.

YEAR LONG ELECTIVES

Agriculture, Food and Natural Resources (Ag Science 1) (Year-long) This is a year-long high school credit course offered to students who have an interest in agriculture. This first course in the career field is an introduction to Agricultural and Environmental Systems. Students will be introduced to the Agricultural and Environmental Systems career field. They will examine principles of food science, natural resource management, animal science & management, plant & horticultural science, power technology and bioscience. Students will examine the FFA organization and Supervised Agricultural Experience programs. Throughout the course, students will develop communication, leadership and business skills essential to the agriculture industry. A supervised Agricultural Experience (home project) is required. Additionally, leadership development is encouraged through participation in FFA activities. FFA membership is required, and several after school activities are part of the grade. This course earns the student ½ credit of science and ¾ credit of elective or 1 ¼ credit toward electives. This is a prerequisite to all Ag. Classes. \$15 fee.

Band (Year-long) Band is a course that allows students to excel in instrumental music. Students will participate in instrumental performances throughout the year.

Choir (Year-long) Choir is open to all students with a desire to excel in vocal music. Emphasis will be placed on the learning of a wide variety of music literature, basic vocal production, sight singing, and fundamental technical skills. Students will participate in performances throughout the year.

Spanish I (Year-long) This course is an introduction to the Spanish language, its culture and its people. Our focus will be on listening and communicating in authentic situations. Reading, writing and Hispanic culture are integrated throughout the course. Students participate in a variety of activities individually, in pairs and in groups to practice their Spanish. Many different materials are used to enhance your language study: authentic items from Spanish speaking countries, art,

movies, videos, games and project presentations, music by popular artist such as Shakira. Also incorporated are Hispanic holiday celebrations with traditional foods, dance programs and guest speakers. This course is for High School credit.

SEMESTER ELECTIVES

Design and Modeling (semester) Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They are challenged and empowered to use and apply what they've learned throughout the unit to design a therapeutic toy for a child who has cerebral palsy. Students are also given the opportunity to work with various equipment in the STEM lab after learning about lab and machine safety.

Family Consumer Sciences (semester) In the 8th grade Introduction to Family and Consumer Sciences (FCS), students will learn foundational skills from a variety of paths within the FCS curriculum. The bulk of the course consists of food safety, nutrition, and food preparation; however, elements of financial management, soft skills for the workplace, and some design projects (Sewing & Interiors) will also be introduced during the semester. This class is for High School credit. There is a limited number of students that will be able to take this course.

Health (semester) Health is a High School credit course. It provides the knowledge to help students make informed and independent decisions concerning their physical, mental, emotional, and social well-being. Health Education encourages students to discover their unique capability and responsibility as health-literate citizens and assists them in developing attitudes and patterns of behavior that will promote a full and satisfying life. The class is based on the National Health Education Standards and covers the following units: Personal Health and Wellness; Safety; Sexual Health; Violence Prevention; Healthy Eating; Physical Activity; Mental Health; Alcohol, Drugs, and Tobacco Prevention.

Intro to Computer Science (semester) This course will allow students to discover computer science concepts and skills by creating personally relevant, tangible, and shareable projects. Throughout the course, students will learn about programming for the physical world by blending hardware design and software development. They will design and develop a physical computing device, interactive art installation, and plan and develop code for microcontrollers that bring their physical design to life. Physical computing projects will promote student awareness of interactive systems, including Internet of Things (IoT) devices, and broaden their understanding of abstract computer science concepts through meaningful and authentic applications.

Robotics II (semester) This course is for students who have completed Robotics I, or who plan to complete Robotics I during the school-year. With this course, student continue to progress through the VEX Robotics platform and start using the V5 curriculum. This system uses V5 block coding and the most up-to-date VEX robotics kits. Students use the VEX Robotics platform to design, build, and program real-world objects such as a speed bot, claw bot, and learn how to control the bot with a controller.

Studio Art 8 (semester) This course is designed so that even the most reluctant artist will find success! Projects are fun and exciting to create. With a willingness to learn, students will be

introduced to materials, techniques, concepts, and processes essential to understanding the visual arts and the role of the artist. Students will learn about the elements of art, principles of design, art history, and aesthetics, as well as, develop a strong art vocabulary. Emphasis will be placed on technique, composition, content, and presentation of student artwork. With teacher approval, students are permitted to produce an independent study in place of any of the projects.

Three-Dimensional Art (semester) This course will introduce students to three-dimensional artwork. Students will explore multiple techniques, tools, and materials to build their own art pieces. In addition, students will be researching and critiquing other artists' work and their contributions to visual arts.

QUARTER (9 week) ELECTIVES

Creative Writing (quarter) In this 9 weeks course, students will be encouraged to put their creativity to print with multiple writing opportunities. Students will review different types of written work and be encouraged to come up with their own works of literary art!

Entrepreneurship (quarter) You will simulate being a business owner. First, you will run a hotel where you hire employees, make game rooms, cafes, salons, reception areas, and guest rooms. Then you get to run a virtual lemonade stand where you get to set prices and tinker with lemonade recipes. A simulation of a kiosk that can sell jewelry, hot dogs, ice cream, or electronics follows this. Finally, you run your own larger business where you hire, fire, order products, set prices, take vacations, set your working hours, and buy advertising. An actual business that consists of manufacturing, marketing, price setting, and sales of a product may be established and run during school hours will be a possibility.

Historically Speaking (quarter) Students will explore history through dramatic readings and storytelling. Students in this class will be able to explore different time periods and historically significant events through various projects and learning modalities. This will be an interactive and engaging journey through our history.

Introduction to Teaching (quarter) Students interested in the educational and teaching career pathway will find value in this course, where they will explore multiple career opportunities in the field of education. Students will examine the goals of education, as well as, review training requirements for this field. In this course, students will also identify characteristics of learners, consider the viewpoints from various different perspectives (i.e.: community, teacher, student, parent, etc.). Employability skills and state requirements for becoming an educator will also be addressed. This is an exploratory course that leads to the Teaching Pathway at the High School.

Media Arts This course is part drama, part creative writing, part visual art, and part computer video editing. There is something for everyone in Media Arts. Groups work together to think of a storyline or topic then write a script based on characters they develop. Students get to act out their creation using costumes, props and locations throughout the school as it is being digitally videoed. The video is then edited and titles, credits, subtitles, and even bloopers are added to the final video. Students will get to take home their video to show friends and family!

Medical Detectives (quarter) Students play the role of a real-life medical detective as they solve medical mysteries through hands on projects and labs. They will investigate how to measure and interpret vital signs, learn how the human nervous system functions through a sheep brain dissection, and complete a laboratory investigation of simulated neurotoxins.

Photography (quarter) This course will help students become well-rounded in the fundamentals of digital photography. Students will receive basic instruction and demonstration at the beginning of each unit. At the end of the course, students will know: how to use various features of the camera to have creative control of your photographs, be able to decide what type of lighting to use in a given situation, and see how photographic composition can make or break a photograph.

Robotics I (quarter) This class is for 8th grade students (and 7th grade students), who have not previously taken a Robotics course at NMS. 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. This course will be taught to both 7th and 8th grade students, which may allow for combined classes.

STEM (quarter) This class is for the students who love exploring all things STEM (Science, Technology, Engineering, and Math). They will have the ability to take this STEM course which will be filled with multiple opportunities to grow and develop their STEM-related skills. This course is designed to be a hands-on, activity-based course, which will include multiple labs and the ability to interact with self-directed projects.

Zoology (quarter) Zoology is a branch of biology that looks at different aspects of the animal kingdom. This class will provide an introduction to the classification system. Students will use dissection techniques to investigate the shape, structure and function of body parts. They will also explore some of the unusual adaptations that animals have evolved to survive in specific environments. Finally, students will research career opportunities within the field of zoology.