Northwestern Middle School

Course Selection Book

2018-2019

NORTHWESTERN MIDDLE SCHOOL
6TH GRADE COURSE SELECTION INFORMATION 2018-2019

All 6th grade students will take the following courses, which are required: Language Arts, Social Studies, Science, Math 6, Reading, Extra Help, Physical Education (9 weeks), Art (9 weeks), and Computer (9 weeks). Students in 6th grade must also take a full year of Choir or Band.

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.

9 Week Rotation Courses - Students choose between:

- **Exploring French-** This course will introduce students to the world of foreign language through learning how to say, write, and recognize some simple French phrases and vocabulary for immediate communication with classmates and family in another language. Learning about the French speaking culture opens up one's eyes to our global society, expands one's opportunities for a richer future, and helps one to become better skilled in one's own language.

- **Science of Technology-** This course is designed to introduce students to all the fun STEAM courses at the Middle School, including engineering, biomed, and agricultural projects. Students will be able to work in the Middle School STEM lab, learning basic lab and machine safety. They will also engage in project-based learning opportunities, including making ice cream.

NORTHWESTERN MIDDLE SCHOOL
7TH GRADE COURSE SELECTION INFORMATION 2018-2019

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 of Physical Education and Health. 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.

CHANGES for 2018-2019-

- We are reducing the number of students in our Math Advanced courses. Please note that if your child was previously in an Advanced Math course, s/he may not be scheduled into an advanced class for 2018-2019. This does not necessarily indicate any concerns or problems with your child's skills or abilities.
- We are also offering a Math 7 Blended course option. This class will continue to focus on Math 7 standards; however, the course will operate at a slower pace. This course is specifically designed for students who may need the opportunity to work in smaller groups or who may need additional remediation and support when learning new math concepts. Students will be scheduled into this course based on teacher recommendations and assessment data.

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 in 7th grade take electives during 2nd period, as well as, having opportunities for coursework later in the day. Students will be required to take Financial Literacy (quarter) and Tech 7 (quarter).

NORTHWESTERN MIDDLE SCHOOL

GRADE 7 COURSE DESCRIPTIONS 2018-2019

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

Tech 7: This course is centered on MicroSoft Office. You will learn the intricacies of Word, Excel, PowerPoint, and Publisher in the setting of Project Based Learning. You will learn how to organize saved files. If time allows, you will learn how to collaborate using Google Slides and how to organize Google Drive.

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, Music Appreciation 8, Art 7, etc.).

- **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? Find out and join us for 9 weeks of hands on learning while engaging in topics about plant science, natural resources, and careers in agriculture, food processing and more.

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.

Coding & Game Design (quarter): The class starts by using a web site called Scratch, which helps to learn the structure and logic of coding. You will make a game and tell a story using Scratch. Then, a coding language called Python is introduced. You will write code to make a game and then to draw a picture that magically appears to draw itself!

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!

Design and Modeling 7 (quarter)- Design and Modeling 7 introduces the basic skills needed to succeed in the stem lab. The class will focus on how to create 3D models, 3D printing basics, laser engraving and CNC design. Students will have the opportunity to create several projects utilizing the technology in the lab. Design and Modeling 7 is recommended for those that wish to take Design and Modeling 8.

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. You will be learning about different types of aircrafts and using your knowledge to design and build various flying machines.

Laboratory Science (semester)- This course allows students to become familiar with the process, equipment and techniques involved in scientific exploration. Students will study the elements of experimental design. We will learn to use the equipment and technology essential to gathering data in a variety of science fields. This may include, but is not limited to, techniques in microscopy, dissection, PCR, culturing bacteria, physics, chemistry and field data collection. The data collected will be evaluated and analyzed. Finally, students will design and implement an experiment of their own choosing. This class may be a combination of 7^{th} and 8^{th} grade students. It is also designed to help students prepare projects and presentations that can be used competitively (i.e.: Science Fair and HOSA).

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 (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.

Science in 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.

Voice (quarter)- This is a course for students who want to build their vocal music skills. This course requires a student to be enrolled in Choir or Band as a 7th grade student. As part of this course students will be practicing individual musical pieces that expand their vocal music skills. Students participating in this course may also prepare for additional performance opportunities, such as Solo and Ensemble. This course may be a combination of 7th and 8th grade students and has limited numbers.

NORTHWESTERN MIDDLE SCHOOL
8TH GRADE COURSE INFORMATION 2018-2019

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, Algebra I, and Algebra I Advanced), and American History. These courses run all year. Algebra and Algebra I Advanced are both for H.S. credit and are accelerated courses for 8th grade students. Students will also be scheduled into an all-year Extra Help class. 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.

CHANGES for 2018-2019-

- We are reducing the number of students in our advanced math courses (Algebra and Algebra Advanced). Please note that if your child was previously in an Advanced Math course, s/he may not be scheduled into an advanced class for 2018-2019. This does not necessarily indicate any concerns or problems with your child's skills or abilities.
- We are also offering a Pre-Algebra Blended course option. This class will continue to focus on 8th grade math standards; however, the course will operate at a slower pace. This course is specifically designed for students who may need the opportunity to work in smaller groups or who may need additional remediation and support when learning new math concepts. Students will be scheduled into this class based on teacher recommendations and assessment data.

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 in 8th grade take electives during 1st period, as well as, having opportunities for coursework later in the day. Students will be required to take Career Connections (quarter) and Physical Education (quarter).

NORTHWESTERN MIDDLE SCHOOL

GRADE 8 COURSE DESCRIPTIONS 2017-2018

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.

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, and 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, Music Appreciation 8, Art 7, Art 8, etc.).

9 Week Rotation Courses- Students have the opportunity to take 2 of these courses:

Ag Science 8- This is a 9 weeks course focused on hands-on learning and group projects. Topics that will be covered in this course include, but are not limited to, poultry science, food science, forestry science, landscaping, and animal issues. Please note that students can take Ag Science 8 even if they did not take Ag Science 7.

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 associate 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.

Drama - Powered By Music- This course will explore connections between music and drama. Students will learn about the history of both subjects and how they are connected. Both stage and screen productions will be studied. This class is very participatory and encourages interaction and cooperation between students.

Exploring Electricity- Through hands-on projects, students explore electricity, the behavior and parts of atoms, and sensing devices. They learn knowledge and skills in basic circuitry design, and examine the impact of electricity on the world around them.

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!

Tech 8: This course is designed to extend student learning with computer programs beyond Tech 7. The curriculum is intended to be student led. Students may explore various computer applications and choose those that are of interest. Possible topics to explore are making videos, reviewing coding, collaboration projects, and exploring apps. The class will work together on learning about Marketing and choosing applications that help promote a product.

Grade 8 Electives- Students have 3 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 an hour a 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

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.

Design and Modeling (Year-long) – Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk® design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions. Students are also given opportunities to work with various equipment in the STEM lab after learning about lab and machine safety. Students taking this course will also be getting curriculum from the Robotics course, as well.

French I (Year-long)- Join us in the study of one of the most beautiful languages of the world—FRENCH. This language is spoken in 55 countries around the world on five continents, is one of the main languages used at the United Nations, and is the second most important language used in international business (after English). In Level 1, you are introduced to speaking, reading, writing, and culture. Before you know it, you are used to listening to and understanding French, and also carrying on short conversations in French. Our beautifully illustrated textbook is supplemented with not only challenging workbook activities, but also listening activities with native speakers on CD, authentic video episodes taped with French-speaking youth from around the world, and various extra group projects, as well as assignments using computer technology. Find out how exciting it is to learn about Francophone cultures the world over. This course is for High School credit.

Spanish I (Year-long)- ¡Ven Conmigo! "Come with me" to experience a new language and a new culture! 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, a DVD program correlated to the text, language websites of all kinds, games and project presentations, music by popular artist such as Shakira and traditional ones, such as La Bamba. Also incorporated are Hispanic holiday celebrations with traditional foods, dance programs and guest speakers. This course is for High School credit.

SEMESTER ELECTIVES

Advanced Art (semester)- This course is designed for highly motivated, exceptional art students who are ready to grow their individual art skills. Artwork will be focused on conceptual ideas in drawing, painting, printmaking, ceramics, and/or sculpture. Students will also explore art history and will experiment with different materials and techniques. Students will engage in activities that deepen their understanding and appreciation for visual arts.

Entrepreneurship (semester): 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.

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 is designed to be the first computer science course for students who are interested in the CS field of study. Students will discover the principles of this fast-growing field by focusing on creativity and an iterative design process as they create their own apps using MIT App Inventor. Students will also learn about programming for the physical world by blending hardware design and software development, allowing students to discover computer science concepts and skills by creating personally relevant, tangible, and shareable projects.

Introduction to Teaching (semester)- 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.), and consider various legal and ethical issues related to the field of education. 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.

Journalism (semester)- Students will be working together as a team to create a student newspaper that will be informative, real, and exciting. This is a newspaper for the students made by the students. You will be introduced to design, copyrighting, publishing, digital photography, writing, and computer skills. As a result, you will be expected to work diligently and responsibly in order to create the best journalism class possible.

Laboratory Science (semester)- This course allows students to become familiar with the process, equipment and techniques involved in scientific exploration. Students will study the elements of experimental design. We will learn to use the equipment and technology essential to gathering data in a variety of science fields. This may include, but is not limited to, techniques in microscopy, dissection, PCR, culturing bacteria, physics, chemistry and field data collection. The data collected will be evaluated and analyzed. Finally, students will design and implement an experiment of their own choosing. This class will be a collection of 7^{th} and 8^{th} grade students. This elective is also designed to prepare students for potential Science competitions (i.e.: Science Fair and HOSA). Due to the nature of the course, students can choose to take this course in both grades (i.e.: re-taking it if they took it previously).

Robotics 8 (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.

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, developing 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 and 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 artist's 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!

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.

Exercise Science (quarter)- This course is designed to introduce students to different types of exercise and physical activity through the investigation of body systems and muscle groups. This will be an active class as students will learn to apply procedures and techniques used in athletic training and rehabilitation. Students will also be looking at health care and sports career fields, as well as, researching current trends in these areas, technology, and the role of sports medicine, athletic training, and exercise science in society.

Health and Wellness (quarter)- In this course students will develop a personalized approach to healthy living. An emphasis will be placed on developing personal health for an adolescent that can be used as they transition through life. Additional topics will focus on problem-solving, work ethics, nutritional and food selections, family dynamics and personal health. This course is also designed to introduce students to different types of exercise and physical activity through the investigation of body systems and muscle groups. Students will also be looking at health care career fields, as well as, researching current trends in the health care.

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.

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 in digital photography. Students will receive basic instruction and demonstration at the beginning of each unit. At the end of the course, you 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.

Voice (quarter)- This is a course for students who want to build their vocal music skills. This course requires a student to be enrolled in Choir or Band as an 8th grade student. As part of this course students will be practicing individual musical pieces that expand their vocal music skills. Students participating in this course may also prepare for additional performance opportunities, such as Solo and Ensemble. This course may be a combination of 7th and 8th grade students and has limited numbers.

Zoology (9 weeks)- 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 student will research career opportunities within the field of zoology.