ALTONA MIDDLE SCHOOL

7th/8th Grade Elective Course Descriptions

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ART

MS Art 7 (7605S) (SEMESTER LONG COURSE)

Prerequisite: None **Fee: $15.00**

Grade Level: 7

Students use skills and knowledge from previous art experiences, along with the new techniques taught, to explore more advanced art processes. Students use a self-led process to explore drawing, painting, paper art and fiber art. Fool-proof ways of improving drawing skills are taught as well as new techniques to help make art experiences more successful.

MS Art 8 (8605S) (SEMESTER LONG COURSE)

Prerequisite: None **Fee: $15.00**

Grade Level: 8

Students use skills and knowledge from previous art experiences, along with the new techniques taught, to explore more advanced art processes. Students use a self-led process to explore drawing, painting, paper art and fiber art. Fool-proof ways of improving drawing skills are taught as well as new techniques to help make art experiences more successful.

Photography (1626S) (SEMESTER LONG COURSE)

Prerequisite: None **Fees: $15.00**

Grade Levels: 7, 8

Students will dig into the digital photography process using digital cameras, iPads, and editing software. The course immerses students in the rules of composition and technical qualities, and focuses on the emotional appeal and individual expression that encompasses digital photography. Students will learn about noted photographers of the past, as well as contemporary artists working in the field. A variety of photography types are explored, including portraiture, landscape, macro and video.

3D Art (1610S) (SEMESTER LONG COURSE)

Prerequisite: None **Fees: $15.00**

Grade Levels: 7, 8

This class explores three-dimensional sculptural art realms using a variety of materials. Students work with, plaster, alginate, linoleum, and other media to create sculptures, 3D origami, body casts, prints, and more!

COMPUTER PROGRAMMING

Beginning Computer Science (1711S) (SEMESTER LONG COURSE) VIDEO GAME DESIGN

Prerequisite: None **Fee: $15.00**

Grade Levels: 8

Design 80s style video games, amazing simulations, and animated stories using block-style coding. Learn computer programming concepts without having to learn a programming language.

Intermediate Computer Science (1712S) PYTHON PROGRAMMING (SEMESTER LONG COURSE)

Prerequisite: **Beginning Computer Science or teacher approval** **Fees: $15.00**

Grade Levels: 7

Python is considered the best language for beginning programmers. It's used by a variety of companies such as Instagram, Google, and our own Seagate Technologies. We learn the basic principles of programming, starting with variables and data types, statements, and functions. You'll build fun games, such as a Silly Name Generator, Rock/Paper Scissors /Lizard/Spock and Hangman.

Cyber Art (1631S) (SEMESTER LONG COURSE)

Prerequisite: None **Fees: $15.00**

Grade Levels: 7, 8

The elements of art meet computer science. While learning about art basics like color, line, value and shape, you will also discover how computers use binary math to create color and store images. Explore your creativity while honing your skills with digital tools like Scratch, Blender and PhotoShop.

Introduction to Cyber Security (1370S) (SEMESTER LONG COURSE)

Prerequisite: **Beginning Computer Science or teacher approval** **Fees: $15.00**

Grade Levels: 7

Cybercrime and cyber terrorism are on the rise. This course was designed to encourage students to begin training in one of the most in-demand professions in our world today. We will:

- examine types of cyber threats
- learn how the internet works (including binary and hexadecimal math)
- use binary math and programming to insert secret data into image files
- encrypt and decrypt messages with cryptology
- examine the seven layers of Open Systems Interconnection
- harden networks against attack, including the use of the command line in Linux
- recognize social engineering tactics
- examine computer ethics and develop a personal code of ethics
- attend the Denver Rocky Mountain Information Security Conference in May

This course could be your first step to a career in cybersecurity. However, it is challenging and requires grit.

Advanced Computer Science (1713S) (SEMESTER LONG COURSE)

Prerequisite: Intermediate Computer Science or teacher approval **Fees: $15.00**

Grade Levels: 8

Each year, students choose an area of study and dive in. These may include;

- ➢ Programming games and web pages using HTML, CSS and JavaScript.
- ➢ Virtual / augmented reality
- ➢ Advanced 3D design with Blender
- ➢ App development
- ➢ Electronics
- ➢ Computing with Raspberry Pi

This course may include training in Agile Scrum, a framework for design and development.

FAMILY AND CONSUMER SCIENCE

MS Family and Consumer Science 7 (7750S) (SEMESTER LONG COURSE)

Prerequisite: None **Fees: $20.00**

Grade Levels: 7

The "learn by doing" method of instruction is used to prepare students with life skills. The child care component of the family science unit will focus on becoming a better babysitter and building your business. The food science unit brings the challenge of planning and competing in Cupcake Wars, in addition to preparing a nutritious breakfast for the entire family. Math skills will be emphasized in the foods unit along with nutrition. Technical reading skills and problem solving will be stressed during our textile science unit as students complete a drawstring bag. Self direction, teamwork, problem solving, and giving best effort will be expected.

MS Family and Consumer Science 8 (8750S) (SEMESTER LONG COURSE)

Prerequisite: None **Fees: $20.00**

Grade Levels: 8

This course prepares students to take on the challenges of young adult consumers, so they may begin to understand the balance of work and family. Students will research and develop a food truck, focusing on entrepreneurial/21st century skills. The food science unit brings the opportunity to make connections between nutrition and optimum health while developing food preparation techniques. A culminating activity will be to prepare a three course nutritious dinner for their family. In the family science unit, students will focus on developing healthy relationships. In the textile science unit, students will have the opportunity to incorporate technology, practice technical reading skills, problem solving, and self direction as they complete a project of their choice.

MUSIC ELECTIVES

BAND

Woodwind Band 7 (7666.1 & 7666.2) (FULL YEAR COURSE)

Prerequisites: Band 6 **Fees: $20.00**

Grade Levels: 7

Introductory band (brass/percussion and woodwinds). Students will learn to play their individual instrument through routine and practice. Students will learn how to read music while learning proper tone and technique on their chosen instrument. These skills will be honed while preparing music for three fun concerts throughout the year. Students do not need prior experience EXCEPT for percussion - percussionists must have 2 years of private piano lessons.

Brass Band 7 (7665.1 & 7665.2) (FULL YEAR COURSE)

Prerequisite: Band 6 **Fees: $20.00**

Grade Levels: 7, 8

Students will improve upon skills learned in Introductory Band. Music will become more complex (and more fun), and we will address more sophisticated musical skills. We will have three concerts throughout the year.

Band 8 (8664.1 & 8664.2)) (FULL YEAR COURSE)

Prerequisite: **Band 7 or teacher approval** **Fees: $20.00**

Grade Levels: 8

Students will continue to master the nuances of their instrument, as well as ensemble playing. Music will become even more complex and mature. Advanced band performs in the usual three Altona concerts per year, but usually also participate in 1-2 off-campus festivals/competitions.

CHOIR

Choir 7 (7672.1 & 7672.2) (FULL YEAR COURSE)

Prerequisites: **None** **Fees: $20.00**

Grade Levels: 7

In Intermediate Choir, students will develop a deeper understanding of the singing voice, proper vocal technique, and music literacy. Performance expectations will include singing music in three or more parts accurately and expressively. This ensemble will participate in 3-4 public performances annually. Students in 7th or 8th Grade may register for this course without auditioning. This course is not open to 6th grade students.

Choir 8 (8672.1 & 8672.2) (FULL YEAR COURSE)

Prerequisites: **None** **Fees: $20.00**

Grade Levels: 8

In Advanced Choir, students will develop a deeper understanding of the singing voice, proper vocal technique, and music literacy. Performance expectations will include singing in four or more parts accurately and expressively. This ensemble participates in 5-6 public performances/ festivals annually.

ORCHESTRA

MS Orchestra 7 (7682.1 AND 7682.2) (FULL YEAR COURSE)

Prerequisite: Orchestra 6 Fees: $20.00

Grade Levels: 7

This course will introduce students to the violin, viola, cello or bass. Students will learn basics of instrument playing and note reading. There will be three concerts throughout the year, and students will perform level appropriate repertoire. Students will be encouraged to further their learning and participate in Intermediate Orchestra.

MS Orchestra 8 (8682.1 AND 8682.2) (FULL YEAR COURSE)

Prerequisite: Orchestra 7 or teacher approval Fees: $20.00

Grade Levels: 8

Students will learn to shift, play in 1st through 4th positions, vibrato and various bowing techniques. In addition to the scales learned in Introductory Orchestra, also learn/memorize F, B flat major and d and g minor. Concerts and concert music will utilize the above skills – repertoire will be chosen accordingly, and will enhance skills learned.

PHYSICAL EDUCATION

MS PE 7 (7505S) (SEMESTER LONG COURSE)

Prerequisite: None **Fees: none**

Grade Levels: 7

Physical Education is a place where students learn the general rules and basic skills of team and dual (partner) activities. During these activities, students will learn how to work with a team or partner to demonstrate good sportsmanship. During the student's time in PE the goal is for students to have fun while developing skills that will lead to a lifetime of health and fitness.

MS PE 8 (8505S) (SEMESTER LONG COURSE)

Prerequisite: None **Fees: none**

Grade Levels: 8

Physical Education is a place where students learn the general rules and basic skills of team and dual (partner) activities. During these activities, students will learn how to work with a team or partner to demonstrate good sportsmanship. During the student's time in PE the goal is for students to have fun while developing skills that will lead to a lifetime of health and fitness.

TECHNOLOGY

Introductory Robotics (1390S) (SEMESTER LONG COURSE)

Prerequisites: None **Fees: $15.00**

Grade Levels: 7, 8

This introductory hands-on class will use the design process to build robots using the VEX Robotics Design System. You will work in design teams of 3-5 to complete a given task and be ready for classroom competition. Beyond science and engineering principles, a VEX Robotics project encourages teamwork, leadership, and problem solving among groups. This curriculum is deadline-oriented so time management and efficiency will be key components to your team's success. We will also explore the history of robotics and take a look at possible career paths. No experience is necessary and any student interested in robotics is welcome to take this class.

Advanced Robotics (1391S) (SEMESTER LONG COURSE)

Prerequisite: Introductory Robotics or teacher approval **Fees: $15.00**

Grade Levels: 8

This class will combine what you learned in Intro to Robotics and Programming with RobotC. You will work in design teams of 3-5 to complete a given task and be ready for classroom competitions that will include both autonomous and driver control. This curriculum is deadline-oriented so time management and efficiency will be key components to your team's success. This class will simulate what it is like to be on a competitive robotics team.

Multimedia (1845S)

Prerequisite: None **Fees: $15.00**

Grade Levels: 7, 8

Multimedia is the combined use of text, graphics, photography, and video to learn about the concepts of storytelling, photojournalism and advertising. In this course students will learn to apply technological tools to show their understanding of topics surrounding media literacy, digital citizenship and important events happening around the world. Topics covered include newswriting, photojournalism, advertising, media literacy, online safety, and social media. Students will explore the Google Suite applications, along with Pages, SketchesPro, LucidChart, and web based platforms. Students will develop a rich understanding of how to consume and produce media. Students also focus on developing professional skills to help them prepare for volunteering, internships and job opportunities in their future.

Tech Squad (Geek Squad 1748S) (SEMESTER LONG COURSE)

Prerequisite: **Application/Interview** **Fee: none**

Altona's Tech Squad supports technology in both the IDEALab and the Library. Students complete training courses and become certified in various skills including 3D Design, Coding, Robotics, Circuitry, Soldering, Wood Burning, Sewing, Virtual Reality, and iPad maintenance. Students **must** apply for this position, and it is an elective course.

WORLD LANGUAGE

Spanish 1 (1836.1 AND 1836.2) (FULL YEAR COURSE)

Prerequisite: None

Grade Levels: 8

In Spanish you will learn the following essential skills/content through the 5 Cs: Communication: you will communicate in a language other than English; this will include reading, writing, listening, and speaking (both spontaneous and prepared). Cultures: you will gain knowledge and understanding of other cultures, recognize how cultural perspectives are reflected in practices, and recognize how cultural perspectives are reflected in products. Connections: you will connect with other disciplines, recognize knowledge of other core classes in the target language and use language resources to find basic information in authentic materials. Comparisons: you will develop insight into the nature of language and culture, identify and use patterns of the target language and compare them with the native language. Communities: you will participate in multilingual communities, participate in situations that use the skills and cultures in the classroom setting and identify and use resources that provide information about the culture being studied. After completing this class you will be able to enter Spanish 2 in high school.