# PACIFIC CREST MIDDLE SCHOOL



# 2018-2019 CURRICULUM GUIDE

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#### Vision

Where identity and relationships are foundational to learning and living in a caring community.

#### Mission

Pacific Crest Middle School exists to empower students as creative thinkers, responsible decision-makers, and engaged members of society through practices that place the learner at the core of instruction.

#### **Equity Statement**

The staff of Pacific Crest Middle School has the inherent responsibility and power within our jobs to create equitable access to a powerful and engaging education for each student regardless of race, ethnicity, gender, language, ability, or socioeconomic status. We believe that all students can achieve, and when students do not, we must claim and own this failure as a deficiency of our institution and not a deficiency of the student or family.

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# **Guiding Principles**

- Understanding who you are is key to developing relationships and building community.
- Parents are children's first teachers and are essential partners in the education of all students.
- The skills of creativity, communication, collaboration, critical thinking, and cultural competence are imperative for the development of 21st century learners.
- The world around us can be explored through systems thinking. Studying systems helps us to understand both the interrelated parts as well as the whole. Scientists, mathematicians and artists use system thinking when they: observe, collect, compare, and analyze parts and patterns.
- The basis of learning is storytelling. We make meaning of the world through the sharing of story. Story provides context and perspective. Everyone has a story to tell, so we have an obligation to listen.
- Writing is an embedded practice. In order to explore new ideas and concepts as well as engage in self-reflection, students and adults will write frequently.
- Play and physical activity are critical to health and support learning.
- The wider community provides opportunities for authentic learning. Service and projectbased learning engages students in their communities, fosters academic excellence, and promotes positive behaviors.
- Teaching and learning requires ongoing collaboration, inquiry, innovation and risk-taking through sustained relationships and shared learning.

### **Curriculum Overview**

At Pacific Crest Middle School, students are scheduled into Learning Communities of roughly 60 students. Each Community has two teachers: a Science teacher and a Humanities teacher. Community time meets for three (3) consecutive periods for the purpose of integrating content from Science, Social Science, and English Language Arts. Our goal is to create learning environments that support and develop the social, emotional, and academic needs of each student by making learning relevant.

In addition to Community classes, students also take Exercise Sports Science and Math as core courses. Students can then choose two elective courses from the disciplines of Music, World Language, Art, Design, or Leadership.

#### 6th Grade Humanities

Humanities class is a blend of Language Arts and Social Studies. Through the exploration of ancient civilizations, students will learn to think, read, write, collaborate and communicate like social scientists. We will also use a reading and writing workshop format to create a community of readers and writers, increase reading and writing skills, and foster enjoyment of these arts.

#### At the end of this course, students will be able to:

- Use geography skills to better understand history and how geography affects settlement patterns and culture.
- Apply the concepts of civilization and culture to the study of ancient civilizations.
- Gather and analyze evidence, make inferences, and form hypotheses or arguments.
- Support a hypothesis or argument with relevant evidence.
- Collaborate successfully and communicate effectively in a wide variety of formats and for varied purposes.
- Read and understand a variety of genres (nonfiction, poetry, short stories, fiction, etc.)for a variety of purposes.
- Read complex texts and use note-taking strategies that match their purpose for reading.
- Analyze, discuss and write about the texts they read.
- Write powerful personal narratives, convincing arguments and informative research.

#### 7th Grade Humanities

In 7th grade Humanities students will explore their role in society, both globally and locally. Using an interdisciplinary approach, students will examine themes of humanity through the study of historical and geographical patterns, contemporary issues, and literature. Humanities blends the English Language Arts curriculum with the Social Studies curriculum in order to build relevance, focus on cross-cutting themes, and provide increased opportunities for project-based learning. In Humanities, students will read and write for a variety of tasks, purposes, and audiences. With an eye on the world, students will analyze how written expression is used to inform, inspire, and influence others and how different points-of-view contribute both positively and negatively, to the complex relationships within a society and between societies. The global patterns will consistently be connected to the students own Bend and PCMS community.

#### At the end of this course, students will be able to:

- Evaluate and synthesize multiple sources (primary and secondary documents, literature, maps, graphs, and data) and use them to make and support claims about complex events, issues, and ideas.
- Write in a variety of formats to communicate ideas and to reflect on their thinking.
- Interpret and connect a variety of literary and informational texts.

#### 8th Grade Humanities

The story of a nation is not only told in the history books; it is also found in the diaries and letters, novels and memoirs, and art and architecture of its people. In 8th grade Humanities, students will explore the story of America's early years and its connections to our modern society and themselves using an interdisciplinary, thematic approach. The interdisciplinary approach combines the English Language Arts curriculum with the Social Studies curriculum. Using themes to connect the history page to the pages of literature enables students to explore how different people, places, ideas, and institutions shaped the development of American society while helping them explore their own developing identities. Throughout the year, students will read and write for a variety of tasks, purposes, and audiences, exploring the power of the written and spoken word to inform, persuade, and transform people.

#### At the end of this course, students will be able to:

- Evaluate and synthesize multiple sources (primary and secondary documents, literature, maps, graphs, and data) and use them to make and support claims about complex events, issues, and ideas.
- Write in a variety of formats to communicate ideas and to reflect on their thinking.
- Interpret and connect a variety of literary and informational texts.

## Science

The **sixth-grade** science course is designed to introduce students to the nature of science through hands-on, inquiry based exploration. This course includes the concepts that scientific explanations are (1) based on logical thinking; (2) subject to rules of evidence; (3) consistent with observational, inferential, and experimental evidence; (4) open to rational critique; and (5) subject to refinement and change with the addition of new scientific evidence. The nature of science includes the concept that science can provide explanations about nature, can predict potential consequences of actions, but cannot be used to answer all questions. It's the spark of discovery that assists students in becoming curious lifelong learners who grow in their understanding of the world.

### Through the exploration of grade level content in earth science, biological science, physical science, and engineering and design, students will be able to:

- Ask questions and define problems
- Develop and use models
- Plan and carry out investigations
- Analyze and interpret data
- Use mathematical and computational thinking
- Construct explanations and design solutions
- Engage in argument from evidence
- Obtain, evaluate, and communicate information

The **seventh-grade** science course is designed to expand students understanding of the nature of science through hands-on inquiry based exploration. This course includes the concepts that scientific explanations are (1) based on logical thinking; (2) subject to rules of evidence; (3) consistent with observational, inferential, and experimental evidence; (4) open to rational critique; and (5) subject to refinement and change with the addition of new scientific evidence. The nature of science includes the concept that science can provide explanations about nature, can predict potential consequences of actions, but cannot be used to answer all questions. Course work will include organization and mathematical analysis of data, manipulation of variables in experiments, and identification of sources of experimental error.

### Through the exploration of grade level content in biological sciences, earth sciences and engineering and design, students will be able to:

- Ask questions and define problems
- Develop and use models
- Plan and carry out investigations
- Analyze and interpret data
- · Use mathematical and computational thinking
- · Construct explanations and design solutions
- · Engage in argument from evidence
- Obtain, evaluate, and communicate information

The **eighth-grade** science course is designed to continue to enhance the students understanding of the nature of science through hands-on inquiry based exploration. This course includes the concepts that scientific explanations are (1) based on logical thinking; (2) subject to rules of evidence; (3) consistent with observational, inferential, and experimental evidence; (4) open to rational critique; and (5) subject to refinement and change with the addition of new scientific evidence. The nature of science includes the concept that science can provide explanations about nature, can predict potential consequences of actions, but cannot be used to answer all questions. Course work will include higher level organization and mathematical analysis of data, further manipulation of variables in experiments, and more practice in identifying sources of experimental error.

### Through the exploration of grade level content in Earth and Space science, physical science, and engineering and design, students will be able to:

- Ask questions and define problems
- Develop and use models
- Plan and carry out investigations
- · Analyze and interpret data
- Use mathematical and computational thinking
- Construct explanations and design solutions
- Engage in argument from evidence
- Obtain, evaluate, and communicate information

## Math

The Math Department at Pacific Crest Middle School covers the Oregon Common Core State Standards for Mathematics (CCSSM) at every each level.

#### At the end of these math courses, students will be able to:

- Make sense of problems and persevere in solving them.
- · Construct viable arguments and critique the reasoning of others.
- Model with mathematics both quantitatively and abstractly
- Use appropriate technology and tools strategically.

#### <u>Math 6</u>

In Grade 6, instructional time focuses on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking. For more detailed information on the CCSSM for Grade 6 you can use this link:

http://www.oregon.gov/ode/educator-resources/standards/mathematics/Documents/ccssm6.pdf

#### <u>Math 7</u>

In Grade 7, instructional time focuses on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

For more detailed information on the CCSSM for Grade 7 you can use this link:

http://www.oregon.gov/ode/educator-resources/standards/mathematics/Documents/ccssm7.pdf

#### Math 8

In Grade 8, instructional time focuses on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem. For more detailed information on the CCSSM for Grade 8 you can use this link:

http://www.oregon.gov/ode/educator-resources/standards/mathematics/Documents/ccssm8.pdf

#### <u>Algebra 1</u>

In the rare case that an 8th grade student has completed 8th grade math during their 7th grade year, they will be able to take Algebra 1. This course begins to build the expertise that mathematics educators at all levels seek to develop in their students. Students will develop skills in problem solving, reasoning and proof, communication, representation, and connections. Students will also build on their knowledge of descriptive statistics, functions, expressions and equations, and geometric relationships; taking the ideas further while using more formal reasoning and precise language. They formalize their concept of a function and encounter linear, quadratic, and exponential functions as well as other examples of non-linear functions. This course presents mathematics as a coherent subject and blends standards from different conceptual categories. The Mathematical Practice Standards apply throughout this course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. This course will mirror the curriculum that is taught freshman year at Summit High School.

# **Exercise Sport Science**

The Exercise & Sport Science Department at Pacific Crest Middle School will strive to provide each student an opportunity to develop into a physically educated person; one who understands the importance of moving more, eating better, increasing healthy social interactions, and mindfulness for oneself & others. We strive to implement this philosophy in a personal and non-threatening manner so that each student can achieve success. We accomplish this goal by offering a well-balanced program that meets and exceeds all district, state and national standards. The Health curriculum will be integrated with Exercise Science. Teachers will work together to share students and space. The work will be designed to encourage student growth in the area of social emotional learning, while incorporating age appropriate health topics. These topics will be designed around the adopted Bend La Pine Schools health curriculum learning targets. These are specific to grade level and are aligned with the state health standards.

#### At the end of these courses, students will be able to:

- · Consistently demonstrate high level effort, enthusiasm and engagement
- Consistently apply content of learning targets to activities, labs, and other ESS activities
- Demonstrate leadership skills in the following areas: communication skills, being proactive, social responsibility, respect for others and self
- · Demonstrate consistent awareness of safe behavior for self and others
- Apply knowledge of strategies, principles, tactics, and concepts related to movement and performance

#### Sixth Grade ESS

Students will be given the opportunity to discover how their body works and explore their strengths and weaknesses in a curriculum that revolves around exercise science components. Each day students will participate in one of the following curriculum components. These components will be designed around facility and time of year (weather).

- Exercise Science Students work in the Exercise Science Lab to test and measure themselves in each area of fitness. Student data will be entered using student iPads.
- Cardiovascular Fitness Students have the opportunity to participate in a 1.5 mile time run.
- Rhythm, Movement & Flexibility Introduce and refine skills through various types of movement and basic coordination. (Yoga, dance, jump rope)
- Muscular strength and endurance techniques and principles are presented in a format to help students understand the value of attaining and maintaining a healthy body.
- Basic Skills Explore the basic skills of hand-eye-coordination. Catching, throwing, striking, etc.

#### Seventh Grade ESS

The three areas of Exercise Science, Cardiovascular Fitness and Muscular Strength & Endurance will continue to be vital components of our curriculum, while incorporating the following three new components:

- The Adventure Academy
- Individual Sports
- Cooperative Games

#### Eighth Grade ESS

The skills developed in both sixth and seventh grades are taken to a more advanced level during the 8th grade year. Students continue to challenge their cardiovascular fitness levels and progress in Muscular Strength & Endurance and they continue their personal portfolio in the Exercise Science lab. A larger emphasis on group dynamics and leadership in Adventure Academy will continue to be an important part of the skills that eighth grade students focus on to help build stronger social emotional skills. During this year we will also focus on team and individual activities that can be played for a lifetime, including volleyball, basketball, pickleball, and golf.

#### <u>Spanish 1</u>

The four language skills (listening, speaking, reading and writing) will be addressed. Students will be expected to communicate at a novice level on topics such as self, classroom, family/pets, calendar, time, weather, friends, activities and food. Students will be exposed to the cultures of the Spanish language.

#### <u>Spanish 2</u>

Prerequisite: C or better in Spanish 1

This course includes a review of the material covered in Spanish 1. Topics will include home, clothing, leisure activities, places/community, parties and celebrations, travel, and entertainment. Students will continue to expand their knowledge and appreciation of Hispanic cultures.

#### French 1

The four language skills (listening, speaking, reading and writing) will be addressed. Students will be expected to communicate at a novice level on topics such as self, classroom, family/pets, calendar, time, weather, friends, activities and food. Students will be exposed to the cultures of the French language.

#### French 2

Prerequisite: C or better in French 1

This course includes a review of the material covered in French 1. It will aim at improving pronunciation and will expand vocabulary and knowledge of structures and grammatical concepts. Topics will include all content from French 1 as well as home, clothing, leisure activities, food, places/community, and animals. Students will continue to expand their knowledge and appreciation of Francophone culture.

#### <u>Japanese 1</u>

In the first year of Japanese, students will learn the language required to talk about themselves, their school and community, their family life and the geography of Japan. They will learn the first alphabet (hiragana) of the Japanese writing system and will be exposed to cultural aspects through participatory activities in calligraphy, origami and Japanese cuisine. Fifty kanji (Chinese) characters will also be taught. Guest speakers will be invited to lead discussions on subjects ranging from business and school life to travel.

#### <u>Japanese 2</u>

Prerequisite: C or better in Japanese 1

This course will be a continuation of the goals and course work introduced in Japanese 1. Increasingly complex language forms will be introduced to create more realistic and natural communication styles. The reading and writing will be entirely in Japanese (i.e., hiragana, katakana and kanji). Additional kanji will be taught. There will be a continued focus on cultural aspects introduced in Japanese 1.

# 6th Grade EXPLORE Wheel

#### World Language / Leadership EXPLORE Wheel

All Pacific Crest 6<sup>th</sup> graders have the exciting opportunity to explore each of the three world languages offered at PCMS, as well as begin their journey as a student leader. Students will spend 9 weeks each in the following classes: Intro to French, Intro to Spanish, Intro to Japanese, and Leadership. This exploratory wheel is automatically scheduled for every 6<sup>th</sup> grader.

### Art 101 (Intro to Art)

In Art 101, students will learn about the building blocks of Art. This will help students understand how art is made and learn the language of art to be more ARTiculate about artwork. Students will be inspired by a variety of artists and techniques, and will explore different mediums. Come explore your creative side.

### <u>Art 102</u>

In Art 102, students will build upon their knowledge of Elements of Art and learn about the Principles of Design. This will help the student understand how to interpret works of art, and design their own works more effectively. Students will be inspired by art history and contemporary artists. They will learn variety of mediums and techniques to express their artistic voice.

### <u>Art 103</u>

Prerequisite: Art 102

Art 103 is an accumulation of ideas and skills. Students will be asked to look at art outside of the traditional box by exploring various materials and conceptual themes. They will continue to learn how to "read/decode" a work of art to better understand how other artists use visual language to communicate. Artists will create their own conceptual artworks and be able to defend their artistic choices.

# Leadership

### <u>Leadership</u>

This course teaches students to be positive change agents. Students will explore the essential question: *How do leaders effectively communicate?* Through this course students will gain a better understanding of their true leadership potential by focusing on goal setting and exploring the influence and potential of effective communication.

Students will also help to lead service learning projects in order to promote a positive and productive school climate. Throughout the course, students will participate in class activities that will demand their best effort. Students are required to complete ten hours (10) of community service during the semester. These hours must be completed outside of the regular school day.

# **Design and Modeling**

#### Intro to Design and Modeling (DM 101)

Many future career choices for today's middle schoolers will involve STEAM (Science, Technology, Engineering, Art, Math). An understanding of engineering and technology and their impact is essential to today's students and our future society. This course is based on the national Project Lead the Way™ curriculum of the same name. In this semester long course, students will learn and apply the design process as a way to systematically solve problems. Students will investigate the conceptual and professional pathways of engineering in order to design, prototype, and test new creations using a 3-D computer aided design tool called AutoDesk Inventor. A 3-D printer is used to model some projects. Students will leave this class ready to design and assemble more complex solutions to real-world design problems.

At the end of this course, students will be able to:

- Explain the wide variety of professions that use the components of STEAM
- Use precision measuring tools such as the caliper
- Work collaboratively to apply the design process
- · Follow precisely a multistep procedure when performing technical tasks
- Design and create part files in Autodesk Inventor such as a puzzle piece.

#### Design and Modeling 102 (DM 102)

Prerequisite: Design and Modeling 101

Design and Modeling 102 builds on the foundational skills learned in DM 101. This course provides students opportunities to apply the design process to creatively solve real world problems. Students participate in various design challenges where they look for ways to improve the lives of children with disabilities. Students learn and utilize methods for communicating design ideas through sketches, physical models, CAD renderings, and 3-D printed models. Students build upon their skills creating more complex digital models on AutoDesk Inventor. Students work in teams to identify design requirements, research a topic, and engage stakeholders. For a culminating project, teams design a toy or game for a child with Cerebral Palsy or other disability, fabricate and test a prototype, and make necessary modifications to optimize the design solution.

#### At the end of this course, students will be able to:

- Work collaboratively to apply the design process
- · Follow complex multistep procedures when performing technical tasks on Autodesk Inventor
- · Depict CAD models in isometric and orthographic projections
- Draw models using one- and two-point perspective
- Design and create part and assembly files in Autodesk Inventor

#### Advanced Design and Modeling (DM 103)

Prerequisite: Design and Modeling 102

This course builds on the skills learned in DM 102. Students apply the design process to larger scope real-world problems. Students participate in various design challenges in preparation for a long term project where teams may design solutions for the empty lot in front of PCMS or create a project of their own. Along with learning increasingly advanced skills on the CAD program AutoDesk Inventor, students gain exposure to the industry standard AutoDesk architectural CAD program called Revit. Our design process this term is based off of Stanford University's d.School (design school) model. Students work more closely with the user/stakeholder to empathize, define the problem, ideate, prototype and test their solutions. Students also document in greater detail the iterative nature of the design process. Collaboration, communication, critical thinking, creativity and compassion are all continually practiced throughout the term.

#### At the end of this course, students will be able to:

- Work collaboratively to apply the design process
- Empathize with and/or research the needs of who they are designing for
- Document iterative changes made throughout the design process
- Follow complex multi-step procedures when performing technical tasks on Autodesk Inventor and/ or Revit
- Design and create part and assembly files in Autodesk Inventor
- · Depict CAD models in orthographic/multiview projections

#### Beginning Band

Beginning Band is a place where students will be allowed to explore the world of instrumental music through their performance on a traditional band instrument (flute, clarinet, saxophone, trumpet, trombone, tuba, or percussion). The key focus will be on quality of sound, technique, and musicality. We will play a variety of musical styles, and genre.

#### At the end of this course, students will be able to:

- · Count rhythms using whole, half, quarter, eighth notes, and rests
- · Play approximately 1.5 octaves of notes on an instrument
- Play in the key of Concert B-flat and E-flat
- Demonstrate through playing an understanding of genre like march or ballad
- Demonstrate through performance how to play with proper intonation and control

#### Advanced Band

Prerequisite: one or more years experience playing instrument

In Advanced Band, we will be working on the same core concepts as Beginning Band with an emphasis on band literature as our teaching model. We will pull music from different nationalities, genre, and tonalities, and increase our proficiency on our core concepts. We will break down our core concepts to include tone, intonation, blend and balance, articulation, rhythm and precision, facility, dynamics, phrasing, interpretation, and style.

#### At the end of this course students will be able to:

- Count rhythms using whole, half, quarter, eighth, sixteenth notes, and rests
- Play the following keys from memory (A-flat, E-flat, B-flat, F, C, and G)
- Play a 1.5 octave chromatic scale using correct and appropriate chromatic fingerings.
- Perform in the correct style (Marcato, legato, ballad, etc)
- Perform at a OMEA or COMEA approved festival where certified judges will critique the performance

#### Beginning Orchestra

Beginning orchestra is designed to teach students the fundamental skills for playing violin, viola, cello, or bass. Students will learn how to hold and use the bow as well as the instrument. They will also learn to read music and rhythm. Students will participate in two concerts during the year. Limited instruments are available to rent through the school.

#### Advanced Orchestra

Prerequisite: one or more years experience playing instrument

Advanced orchestra is an upper level orchestra for students who have played for at least one year. Students must be proficient in note reading and comfortable in first position on all 4 strings. Students will explore different styles of music while learning more advanced skills on their instruments. There are concerts and festivals scheduled throughout the year. Limited instruments are available to rent through the school.

#### <u>Choir</u>

Choir is open to all students with or without previous singing experience. A wide variety of music is studied and performed. Performance opportunities at concerts and festivals are a part of this class. Emphasis is on skill, musicianship and character development.