

West Linn–Wilsonville School District
Science Department – Course Statement

<u>Course Title: Geology</u>	
Length of Course:	Semester
Number of Credits:	1
Grade Level:	9*, 10, 11, 12 * Not always available in 9th grade???
Prerequisites:	None or previous science class????
CIM Work Samples	
Offered in Course:	Possible opportunities for speaking work samples
Date of Description/Revision: 2002	

Course Overview	
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This is a course which includes crystal development; identification of minerals; igneous, sedimentary and metamorphic rock; erosion, glaciation, geologic oceanography, continental drift, faults, earthquakes, volcanoes, mountain building, formation of fossil fuels, structure of the earth, and geological mapping. Activities will include an all day field trip to an area of geological interest. Upon completion of the course, a student will have basic skills in rock identification, geological map interpretation and a general understanding of the materials and forces, which interact to sculpt the earth. Evaluation is based on daily assignments, tests and lab work.

Essential Questions	Concepts providing focus for student learning
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- How does science ask and answer questions?
- What are the mechanisms of change in geologic systems?
- What clues do current geologic features provide about past geologic processes?
- What is the relationship between geologic features and the environment?

Proficiency Statements	
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- Upon completion of course, students will be able to:
- Explain the relationship of earth to the rest of the solar system including the causes of seasonality on earth and phases of the moon.
 - Explain and illustrate the materials and processes that make up the rock cycle.
 - Illustrate and explain the process of plate tectonics and continental drift and the geologic features created by these processes.
 - Explain the processes of crystal formation and explain key characteristics used to identify minerals.
 - Describe the various types of igneous rocks and associated materials and the processes and features associated with igneous activity.
 - Describe the various types of sedimentary rocks and associated materials and the processes and features associated with erosional forces.
 - Explain how metamorphic processes change rocks and where those rocks are most likely to be

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<p>found.</p> <ul style="list-style-type: none"> • Explain the key geologic processes and events that have led to the Oregon we see today. • Interpret topographic maps for geologic features. • Discuss the uses of geology in society. 	
General Course Topics/Units & Timeframes	
<ul style="list-style-type: none"> A. Space B. Earth C. Plate Tectonics and Continental Drift D. Minerals and Crystals E. Igneous Rocks and Processes F. Sedimentary Rocks and Processes G. Metamorphic Rocks and Processes H. Oregon Geology I. Maps J. Geology in Other Areas of Study 	
Resources	
<ul style="list-style-type: none"> • Text: <i>Earth Science, 9th Edition</i>, Prentice Hall, 2000 • Other: Variety of readings, films, and labs 	