Course Outline for

Oceanography

Henderson Bay High School
2007-08
George Palo

Following is a list of objectives to be completed by students to earn credit in ***OCEANOGRAPHY.*** Beneath each objective, is a list of learning targets related to the objective, followed by assessment(s) on which students show proficiency to complete the objective successfully.

OBJECTIVE 1:	MATERIALS/RESOURCES	LEARNING TARGETS	ASSESSMENTS:
Students will understand the location and geology of the earth's oceans and seas.	Class room materials include world maps, computer mapping programs, textbook materials, earth science laboratory exercises and outside readings and related articles, internet and technology support materials and instructor designed assignments.	Students will demonstrate their ability to observe, measure, record, graph, identify, calculate, interpret, classify, build models, and use technology through a variety of class assignments. Students will demonstrate knowledge of the locations of the earth's seas and oceans by completing class assignments. Students will demonstrate knowledge of basic geological terms and features as they relate to oceanography by completing class assignments. Students will demonstrate knowledge of plate tectonics as it applies to oceanography through the completion of class assignments. **Targeted Washington State Science EALRS are the following.** **1.2.1, 1.2.2, 1.2.4, 1.2.5, 1.3.4, 1.3.5, 1.3.6, 1.3.7, 2.1.1, 2.1.3, 2.1.4, 2.2.2, 3.1.1,** **Information about the above EALRS can be found at the following website:** **http://www.k12.wa.us/curriculumInstruct/science/ealrs.aspx**	**Classroom quizzes and tests at 90% (both written and oral) **Completion of classroom assignments at 90% **Ongoing classroom inquiry questioning by instructor **Lab work (model design and building, physical and chemical lab work) results that demonstrate knowledge of process skills and information at 90%. **Mastery learning assessment at 90% will be strongly stressed as evidence of learning.

OBJECTIVE 2: **Students will understand the ocean's plant and animal systems.**	MATERIALS/RESOURCES Class room materials include world maps, computer mapping programs, textbook materials, earth science laboratory exercises and outside readings and related articles, internet and technology support materials and instructor designed assignments.	LEARNING TARGETS Students will demonstrate their ability to observe, record, identify, interpret, classify, dissect, prepare, summarize, use technology, use microscopes, read a barometer, thermometer, and anemometer through a variety of class assignments. Students will demonstrate knowledge of the different sea life types in the oceans and Puget Sound by completing class assignments. Students will demonstrate knowledge of some basic ecological terms and vocabulary as it relates to life in the oceans and Puget Sound by completing class assignments. Students will name some of the common sea life and sea birds found in and near Puget Sound as indicated in class room assignments. Students will complete a research package on an animal of their choice as it relates to oceanography as determined by the class instructor. **Targeted Washington State Science EALRS are the following.** **1.2.1, 1.2.2, 1.3.6, 1.3.7, 1.3.10, 2.1.1, 2.2.2, 3.1.1,** **Information about the above EALRS can be found at the following website:** **http://www.k12.wa.us/curriculumInstruct/science/ealrs.aspx**	ASSESSMENTS: **Classroom quizzes and tests at 90% (both written and oral) **Completion of classroom assignments at 90% **Ongoing classroom inquiry questioning by instructor **Lab work (model design and building, physical and chemical lab work) results that demonstrate knowledge of process skills and information at 90%. **Mastery learning assessment at 90% will be strongly stressed as evidence of learning.

OBJECTIVE 3: **Students will understand the physical characteristics of the oceans and the interaction of the oceans with the atmosphere.**	MATERIALS/RESOURCES Classroom materials to include tide and current books, internet materials, and weather class room activities when necessary as well as earth science materials and chemistry materials developed by the instructor for class room use..	LEARNING TARGETS Students will demonstrate their ability to observe, measure, record, graph, identify, calculate, classify, interpret, and use technology through a variety of class assignments. Students will demonstrate knowledge of ocean currents, tides, tide books, and nautical charts or maps by completing class assignments. Students will demonstrate knowledge of the physical characteristics of sea water through completing class assignments. Students will demonstrate correct laboratory analysis techniques by analyzing water and completing classroom lab assignments. Students will demonstrate knowledge of the concept of ocean waves and wave dynamics and terminology through the completion of class assignments. Students will demonstrate knowledge of the interaction of weather and oceans by completing class assignments. Students will demonstrate knowledge of the interaction of the ocean upon the weather of Puget Sound by completing class assignments. **Targeted Washington State Science EALRS are the following.** **1.1.3, 1.1.5, 1.2.3, 1.3.6, 1.3.7, 2.1.1, 2.2.2, 3.1.1,** **Information about the above EALRS can be found at the following website:** **http://www.k12.wa.us/curriculumInstruct/science/ealrs.aspx**	ASSESSMENTS: **Classroom quizzes and tests at 90% (both written and oral) **Completion of classroom assignments at 90% **Ongoing classroom inquiry questioning by instructor **Lab work (model design and building, physical and chemical lab work) results that demonstrate knowledge of process skills and information at 90%. **Mastery learning assessment at 90% will be strongly stressed as evidence of learning. •

OBJECTIVE 4:	MATERIALS/RESOURCES	LEARNING TARGETS	ASSESSMENTS:
Students will understand the role of the media, media technology and information resources as a necessary part of our understanding of our interaction with the earth's oceans.	Class room materials to include printed materials such as magazines, newspapers and other articles provided by the instructor as well as videos and internet materials that will allow students the necessary information to complete this objective.	Students will demonstrate their ability to observe record, identify, interpret, prepare, summarize, and use technology through a variety of class assignments. Students will demonstrate knowledge of the role of the media in reporting about oceanography by completing class assignments. Students will demonstrate knowledge of different careers in oceanography and the necessary steps to achieving these careers by completing a variety of class assignments. **Targeted Washington State Science EALRS are the following. 3.1.1, 3.2.3, 3.2.4,** **Information about the above EALRS can be found at the following website: http://www.k12.wa.us/curriculumInstruct/science/ealrs.aspx**	**Classroom quizzes and tests at 90% (both written and oral) **Completion of classroom assignments at 90% **Ongoing classroom inquiry questioning by instructor **Lab work (model design and building, physical and chemical lab work) results that demonstrate knowledge of process skills and information at 90%. **Mastery learning assessment at 90% will be strongly stressed as evidence of learning.