



Course Outcomes Form Northwest Indian College

All hand-outs are posted on the faculty website at www.nwic.edu/faculty (follow the Assessment link)

Before completing this form, please refer to the *Instructions for Completing the Course Outcomes Form*. Please submit this form electronically to Shidon Aflatooni at saflatooni@nwic.edu.

Last date this form was updated or edited	15 May 2007
Course Number (e.g., ENGL 101)	ENVS 440
Course Name (e.g., English Composition I)	Ecology of the Salish Sea
List all instructor(s) who participated in creating and approved these course outcomes (please consult with at least one other person)	Linda Ward, John Rombold, Dan Burns
List the main textbooks, readings or other resources used in this course (including title, year and publisher)	Nybakken, James W. 2005. Marine Biology: An Ecological Approach. Addison-Wesley: Reading, MA.
	Dethier, M.N. 1990. A Marine and Estuarine Habitat Classification System for Washington State Natural Heritage Program, Washington Department of Natural Resources. 60 pp.
	Washington State Department of Natural Resources. 2001. Washington State Exotics Expedition 2000: A Rapid Survey of Exotic Species in the Shallow Waters of Elliott Bay, Totten and Eld Inlets, and Willapa Bay.

A. NWIC outcomes: From the *List of NWIC Outcomes*, select the *most* important outcomes you assess in this course (at least one NWIC outcome must be chosen- **maximum of four**).

NWIC outcome # (e.g., “Written communication: 2a. write standard English”)	Instructional Activities: How will students master this outcome? (e.g., solving problems, group activity)	Assessment/Evaluation Strategies: How will you measure this outcome? (e.g., student presentations, essays)
Cultural: 1a. sense of place	All course studies are based in the Salish Sea region and conducted on marine areas of the Lummi Reservation: 9 field lab activities Group participation in local marine species survey Group marine research project	Understanding of place expressed in 9 Written field lab reports Presentation of results of local marine species survey Presentation of a group marine research project
Reading skills: 6a. demonstrate understanding of readings.	Read textbook and other materials for content Read scientific papers for research project	Midterm and Final Exam essays Participation in class discussion Abstract, Introduction, and Discussion sections of group scientific paper
Written communication: 2b. write in a variety of text forms using various credible sources.	Write 9 weekly lab reports of lab activities and findings Write a group scientific paper with citations Write Midterm and Final Exam essays	Written field lab reports Scientific paper; indicate main author for each section Midterm and Final Exam essays
Quantitative skills: 5b. use analytical and critical thinking skills to draw and interpret conclusions.	Use analytical methods to evaluate results of ongoing marine species survey Select and use analytical methods for group research project	Marine species survey calculations and results Selection and correct use of analytical methods

B. Course outcomes: In order of priority, list the most important other learning outcomes for this course that you assess (a maximum of 10).

Other course outcomes: Complete the sentence – As a result of this course, students will be able to...	Instructional Activities: How will students master this outcome? (e.g., solving problems, group activity)	Assessment / Evaluation Strategies: How will you measure this outcome? (e.g., student presentations, essays)
Identify the main marine issues of concern for the Salish Sea and propose recovery strategies.	Weekly field labs Readings Lecture Group research project	Weekly field lab reports Group research project design and results Midterm & Final exams
Design and carry out a limited marine research project with scientific paper.	Readings Lecture Group research project	Group research project design and scientific paper
Characterize marine waters of the Salish Sea: tidal flows, effects of estuaries, areas of higher/lower salinity, dissolved oxygen, nutrient and pollutant concentrations.	Weekly field labs Group research project Lecture Readings	Weekly field lab reports Group research design and analysis Midterm & Final exams
Participate in an ongoing intertidal marine species survey and calculate results.	Readings Lecture Participation in marine species survey and calculation of results	Marine species survey results
Identify common Salish Sea phytoplankton and algae with their “bloom” seasons and their habitat types.	Weekly field labs Marine species survey Group research project Lecture Readings	Weekly field lab reports Species survey results Group research project design and Discussion section of paper
Correlate the variety, abundance and ecological importance of common Salish Sea zooplankton with nutrient and phytoplankton levels.	Weekly field labs Marine species survey Group research project Lecture Readings	Weekly field lab reports Species survey results Group research project design and Discussion section of paper
Identify common Salish Sea marine invertebrates with their life histories.	Weekly field labs Marine species survey Group research project Lecture Readings	Weekly field lab reports Species survey results Group research project design and scientific paper
Identify common Salish Sea fishes and marine mammals with their habitat requirements.	Weekly field labs Marine species survey Group research project Lecture Readings	Weekly field lab reports Species survey results Group research project design

C. Please list the NWIC outcomes and course outcomes from above on your syllabus.

D. Please assess the NWIC outcomes and course outcomes, which are listed above, in your classes.