



Course Outcomes Form Northwest Indian College

Hand-outs are posted on the Assessment website (<http://ww2.nwic.edu/faculty/assessment/assessment.htm>)

Before completing this form, please refer to the *Instructions for Completing the Course Outcomes Form*. Please submit this form electronically.

It is important to keep the following principles in mind when completing the forms:

- Regardless of the mode of learning (i.e., face-to-face, Independent learning, ITV, online, etc.) or the location of a course, only one course outcomes form should be completed for each course.
- Regardless of the mode of learning or the location of a course, the **NWIC outcomes** and the **Course outcomes** must be the same for a course.
- The **Instructional activities** and the **Assessment/evaluation strategies** may differ depending on the mode of learning. Please note **Instructional activities** and the **Assessment/evaluation strategies** that are different from the face-to-face class in each box (e.g., "IL: Essay").

Last date this form was updated or edited	1/28/2013
Course Number (e.g., ENGL 101)	Math 103
Course Name (e.g., English Composition I)	Precalculus 1
List all instructor(s) who participated in creating and approved these course outcomes (please consult with at least one other person)	Cassandra Cook, Jay Giles, Matteo Tamburini, Dan Williams, Jane Cameron, Amy Wilson, Ted Williams, John Rombold
List the main textbooks, readings or other resources used in this course (including title, year and publisher)	

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)
Quantitative skills: 5a. Propose solutions to and solve real-world problems by applying the correct numerical data.	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.
Quantitative skills: 5b. Use analytical and critical thinking skills to draw and interpret conclusions.	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.

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)
Define, compose and evaluate functions in their multiple representations (equations, tables and graphs).	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.
Use functions to create mathematical models for realistic situations, identify a reasonable domain for the situation.	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.
Use algebraic methods or a calculator to find the extrema of a function used in a model.	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.
Make and interpret conclusions about a situation based on the functions being used as models.	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.
Define and apply logarithms and their properties.	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.

Solve equations involving linear, quadratic, rational, radical, literal, exponential, and logarithmic functions as well as functions defined by a table or graph.	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.
Describe and apply the characteristics of the domain and graph of polynomial, rational, radical, exponential, and logarithmic functions as well as functions defined by graphs, tables, compositions, or inverses, including functions that are defined piece-wise.	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.
Use the properties of $f(x)$ to describe or sketch the graph of $y = a \cdot f(b(x + c)) + d$	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.
Determine and compose the inverses of functions defined by equations, graphs, tables, or words;	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.
Use exponential functions to model compound interest.	A variety/combination of short lectures, monitored practice, discussion, small group activities, independent practice and reflection.	Analyzing assignments, quizzes and exams; evaluating student presentation.

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.