Course Outcomes Form
Northwest Indian College

Follow the *Instructions for Completing the Course Outcomes Form, which is* available on the *NWIC* Assessment Website at http://www.nwic.edu/assessment/course-outcomes
Please submit this form electronically to the chair of the Curriculum Committee

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

- 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 is to be created 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 each course.
- The **Instructional activities** and the **Assessment/evaluation strategies** may differ depending on the mode of learning. Please indicate the **Instructional activities** and the **Assessment/evaluation strategies** that are different from the face-to-face class (e.g., "IL: Essay").

Last date this form was updated or edited	1/15/2015
Course Number (e.g., ENGL 101)	MATH 125
Course Name (e.g., English Composition I)	Calculus & analytic Geometry II
List the names of all instructor(s) who participated in creating and approved these course outcomes (please consult with at least one other person)	Matteo Tamburini, JiaJia Chang, Cassandra Cook
List the main textbooks, readings or other resources used in this course (including title, year and publisher)	Calculus: Single Variable (5^{th} edition): Hughes-Hallett, Gleason, McCallum et al. Wiley, 2009

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)**
use analytical and critical thinking skills to draw and interpret conclusions from multiple perspectives including Indigenous theory and methods	Ongoing individual and group problem solving.	Students' ability to solve a variety of problems on the final exam.

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)**
precisely define the definite integral as a limit of Riemann sums	Presentation by instructor, group discussion, individual problem solving.	Individual interactions with students, observation of class discussion, assignments and quizzes.
estimate definite integrals using a variety of methods; describe under what conditions a technique for estimating an integral results in an overestimate or an underestimate	Presentation by instructor, group discussion, individual problem solving.	Individual interactions with students, observation of class discussion, assignments and quizzes.
find antiderivatives graphically	Presentation by instructor, group discussion, individual problem solving.	Individual interactions with students, observation of class discussion, assignments and quizzes.
use the Fundamental Theorem of Calculus to evaluate definite integrals and to represent a particular antiderivative	Presentation by instructor, group discussion, individual problem solving.	Individual interactions with students, observation of class discussion, assignments and quizzes.
compute antiderivatives and definite integrals using substitution, integration by parts, partial fractions or trigonometric substitution	Presentation by instructor, group discussion, individual problem solving.	Individual interactions with students, observation of class discussion, assignments and quizzes.
determine whether an improper integral converges, and compute improper integrals	Presentation by instructor, group discussion, individual problem solving.	Individual interactions with students, observation of class discussion, assignments and quizzes.
apply techniques of integration to compute a	Presentation by instructor, group discussion, individual	Individual interactions with students, observation of class

variety of quantities such as area, volume, density, center of mass, work, fluid pressure or arc length	problem solving.	discussion, assignments and quizzes.

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

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