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	January 11, 2008
Course Number (e.g., ENGL 101)	ENVS 430
Course Name (e.g., English Composition I)	Aquatic Ecology: Water Webs and Cycles
List all instructor(s) who participated in creating and approved these course outcomes (please consult with at least one other person)	Brian Compton; Dan Burns enlisted Richard P. Barbiero, Ph.D., Senior Environmental Scientist CSC, from Chicago to help with the syllabus
List the main textbooks, readings or other resources used in this course (including title, year and publisher)	Freshwater Ecology: Concepts & Environmental Applications, 2002. W. K. Dodds. Academic Press. ISBN-13: 978-0122191350
	Introduction to Limnology, 2004. S. Dodson, McGraw Hill. ISBN-13: 978-0072879353

A.

NWIC outcomes: From the *List of NWIC Outcomes*, select the <u>most</u> important outcomes you <u>assess</u> in this course (at least <u>one</u> 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)
Outcome 2a. Students will be able to write standard English.	Written lab reports	Written lab reports

B. Course outcomes: In order of priority, list the <u>most</u> important other learning outcomes for this course that you <u>assess</u> (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)
1. Summarize information regarding seasonal physical and chemical cycles in lakes, including different types of thermal stratification and their expected vertical profiles of light, heat and materials.	Reading, lectures, field trips to measure oxygen and temperature profiles in stratified lakes.	Write-up of field trip results, performance on exams.
2. Describe the ecological role and function of common freshwater aquatic biota.	Reading, lectures, collection and identification of phytoplankton, zooplankton and macrophytes from a lake and benthic invertebrates from a stream.	Student drawings and descriptions of organisms identified in lab, performance on exams.
3. Identify impacts of anthropogenic disturbances, such as nutrient loading, on aquatic systems.	Reading, lectures, field trips to lakes of different trophic status.	Performance on exams, write-up of results of field trips.
4. Explain the importance of physical factors in determining biological community composition in streams and rivers	Field trips to examine physical structure and flow regime of streams, and collect macroinvertebrates from different reaches of stream representing different physical habitats, course readings and lectures.	Calculation of different macroinvertebrate indices and relate to physical characteristics.

- 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.