| **Global Learning Student Learning Outcome Addressed** | **Assessment Method** | Assessment Results |
| --- | --- | --- |
| **Global Awareness:** Students will be able to demonstrate knowledge of the interrelatedness of local, global, international, and intercultural issues, trends, and systems. | Assessment Activity/Artifact:  Students will be required to solve assigned problems on population growth modeling and resource consumption that demonstrate understanding of the interrelatedness of environmental problems and the impacts of population, affluence and technology on the magnitude of environmental impacts.  Evaluation Process:  The problems will be evaluated using a point system that gives a certain weight to various parts of the solution. The total number of points for each problem is 10 points (2 points for understanding and interpreting the problem, 4 points for methodology, and 4 points for calculations).  Minimum Criteria for Success:  Students will achieve a 7 or better for each problem based on a 10-point evaluation system.  Sample:  All students will be assessed. | *To be entered after each time course is taught* |
| **Course Learning Outcome** |
| Students will demonstrate an understanding of the interrelatedness of environmental problems around the world, that these problems have no national borders, and that the extent of these problems is affected by the different socioeconomic, technological, and other conditions. |
| **Use of Results for Improving Student Learning** | | |
| *To be entered after each time course is taught* | | |

| **Global Learning Student Learning Outcome Addressed** | **Assessment Method** | Assessment Results |
| --- | --- | --- |
| **Global Perspective:** Students will be able to conduct a multi-perspective analysis of local, global, international, and intercultural problems. | Assessment Activity/Artifact:  Group project on selected environmental problem (e.g., worldwide transportation sector’s contribution to fossil fuel consumption and greenhouse gas emissions) – this will be assessed through both an oral presentation and a brief written report.  Each group will have between 5 and 10 students so that there are a total of not more  than ten groups to accommodate student presentations in the allotted class time (group size will depend on class size; the Fall 2010 class enrollment is ~60 students). Since the  CEE department awards separate BS degrees in both Civil Engineering (CivE) and in  Environmental Engineering (EnvE), and ENV  3001 is mandatory for both groups of students, will try to ensure that at least one student from each program (i.e., CivE and  EnvE) is present in each group.  Evaluation Process:  1. The oral presentation will be evaluated based on accuracy and depth, and demonstration of understanding of the global issues involved by peer groups and by the instructor(s) using a 5-point rubric.  2. Students will also be assessed for the written report submitted. This assessment will be evaluated using a  5-point rubric.  Minimum Criteria for Success:  1. Groups will require a 3 or better performance out of 5 for their oral presentations.  2. Groups will also require a 3 or better performance for their project reports.  Sample:  All students will be assessed. | *To be entered after each time course is taught* |
| **Course Learning Outcome** |
| Students will be able to conduct an analysis of the global nature of a selected environmental problem and the extent to which factors such as economics, technology, and society contribute to the problem. |
| **Use of Results for Improving Student Learning** | | |
| *To be entered after each time course is taught* | | |

| **Global Learning Student Learning Outcome Addressed** | **Assessment Method** | Assessment Results |
| --- | --- | --- |
| **Global Engagement:** Students will be able to demonstrate willingness to engage in local, global, international, and intercultural problem solving. | Assessment Activity/Artifact:  Assessment Activity/Artifact:  Reflection on group project: student comment on their personal and professional problem solving philosophy as environmental engineers, and the influence of the project and course on that philosophy.  Evaluation Process:  1. Survey students using a Likert scale to measure if their philosophy has changed (e.g., 1 = no change in philosophy, 2 = some change, 3 = significant change)  2. Open ended reflective essay on the impact of the course and project on their problem solving philosophy.  Writing proficiency will be evaluated using a 5-point rubric.  Minimum Criteria for Success:  1. 2 on a 1-3 scale  2. Students will provide a minimum of two ways the class has/has not influenced their problem solving philosophy.  3. Students will require a 3 or better performance out of 5 for their essays.  Sample:  All students will be assessed. | *To be entered after each time course is taught* |
| **Course Learning Outcome** |
| Students will demonstrate a willingness to develop an engineering solution, process, or technology that reduces adverse environmental impact, is more sustainable, and is appropriate within the framework of economic, technological, and societal factors at national, regional, and global levels. |
| **Use of Results for Improving Student Learning** | | |
| *To be entered after each time course is taught* | | |