2. **SLO(s) being assessed:** Student will..

   - SLO 2: Students will be able to read analytically and critically.
   - SLO 3: Students will be able to critique and construct an argument effectively.
   - SLO 8: Students will be informed and engaged citizens of the U.S. and the world.

3. **AGSC Content Area of Alignment:**
   Area IV: History, Social and Behavior Sciences

4. **Assessment Method(s):**

   [Explain how assessment for the measures associated with this SLO - not grading for the course as a whole - was conducted. You may cut/paste rubrics for inclusion here, identify faculty reviewing committees, or identify specific kinds of test questions important to your method. Is this the method you initially planned to use? Provide a separate paragraph for each method].

   Our first method to assess the extent to which students achieved the above 3 learning outcomes was to evaluate student answers to questions on the final exam, and determine if these answers adequately assessed student competency in each learning outcome. For HONR 1027, these questions also were given in a pre-test at the beginning of the semester, so that student answers on the final exam not only assessed competency in each SLO, but also how much students had improved in competency during the semester.

   We used the SLO Rubrics developed by the Core Curriculum Committee, and matched selected exam questions with each type of specific learning outcome in the rubric within each of the 3 major SLOs being examined. We identified 4 final exam questions in HONR 1027 (also given as pre-test questions at the start of the semester), and 8 final exam questions in HONR 1037. We then determined the competency of the average student in answering these questions as they addressed each learning outcome: was the average student’s competency Advanced, Intermediate, or Basic, as described in the rubrics? Our second method to assess student achievement of learning outcomes was to determine their scores on grading rubrics for their final projects in each course. In HONR 1027, each student wrote a term paper and made an oral presentation that addressed a major issue in sustainable food or water systems. In HONR 1037, each student designed and presented a poster that addressed a major issue in sustainable energy, transportation, or materials consumption and waste. We designed components of the grading rubric for each assignment to address student competency in the 3 above SLOs. We then determined the scores of the average student on these grading rubrics, and determined if student competency was advanced, intermediate, or basic.

5. **Findings: What assessment data did each assessment method produce?**

   HONR 1027 SLO 2: Reading analytically and critically. The course final project was a term paper in which each student read several published articles in peer-reviewed scholarly journals, then used this information to write about a major sustainability issue in food and water use. On the grading rubric for this term paper, students were evaluated to determine their competency in identifying and summarizing the major points made in the readings that they used as sources for writing the term papers. The 41 students in the course earned an average of 82.7% of 15 possible points for this rubric category (range = 20 – 100%). Thus, it appears that the competency of the average student was intermediate with respect to this SLO. SLO 3: Critiquing an argument effectively. For the same term paper assignment, another component of the grading rubric assessed student competency in identifying the central ideas, supporting evidence, and context of arguments concerning their chosen topics in food and water sustainability. On this component of the grading rubric, the 41 students in the course earned an average of 81.3% of 15 possible points (range =
Core Curriculum Assessment Report 2012-2013

Department  Honors College
Representative Nanette Chadwick
Academic Year 2012_13

Course Name / number HONR1027, HONR1037

20-100%). Thus, the competency of the average student also appeared to be intermediate with respect to this SLO. SLO 8: Informed and engaged citizenship in the nation and the world. Finally, for the same term paper assignment, a third component of the grading rubric assessed student competency in describing the social, economic, and environmental systems context of their chosen issue in food or water sustainability, and their awareness of and engagement with this issue at a national or international scale. On this component of the grading rubric, the 41 students in the course earned an average of 86.2% of 10 possible points (range = 30-100%). Thus, the competency of the average student as assessed through the term paper again appeared to be intermediate with respect to this SLO. We also used a pre- and post-test system to assess student competency in terms of their awareness of and engagement with sustainability issues as they relate to citizenship. On the first day of class before providing to students any course content, we gave them a pre-test with 4 citizenship-related questions, and then we asked the same 4 questions on the final exam at the end of the course. For the 41 students in the course, the percent who answered these questions correctly at the beginning and at end of the course were: (1) Sustainability is defined as meeting the needs of the present: % correct at start % correct at end a. while preserving our cultural and economic systems. b. without compromising the ability of future generations to meet their own needs. (correct) c. without compromising the ability of the environment to function. 51.2% 97.6% d. while maintaining human systems for future generations. (2) The 3 major systems that are considered when assessing sustainability are: a. Economic, Social, Scientific b. Environmental, Cultural, Political 88.4% 100% c. Social, Economic, Environmental (correct) d. Scientific, Political, Economic (3) A person’s ecological footprint is a way to represent the amount of land and sea area that is needed to: a. process all the trash produced by each person. 55.8% 97.6% b. provide living space for each person. c. produce all the items consumed by each a person. d. support the current lifestyle of each person. (correct) (4) Global human population size is: a. increasing at an exponential rate. (correct) b. increasing at a linear rate. 81.4%

97.6% c. currently at peak levels and expected to decline soon. d. on the decline, especially in some countries. At the beginning of the course, only about half the students could correctly define sustainability and the social imperative it encompasses in terms of responsibility toward future generations. As well, only about half understood the concept of the ecological footprint as a measure of the impacts of their individual lifestyles on the planet. They did better in terms of understanding the linked social, environmental, and economic systems that are considered in sustainability, and understanding how human population is growing, with all of the implications for these intertwined systems. By the end of the course, the average student in this course had become advanced in competency the above concepts: almost all of them could correctly identify the major systems affected by sustainability issues, and understood how their ecological footprints impact environmental systems, how human population is growing, and how sustainability involves social responsibility toward future generations. HONR 1037 Our assessment for this course, in terms of student performance on final exam questions and final project grading rubrics revealed the following results: SLO 2: Reading analytically and critically. Students read and discussed an article that described the history of electric car use in the USA, and the social factors that influenced a shift in use to gasoline-powered cars away from electric during the early 1900s, especially gender issues. They then answered this question on the final exam: (1) Which of the following account(s) for the fact that electric cars lost their market share to gasoline powered vehicles (in the early 1900s)? a. Electric vehicles were limited in range. b. Gasoline touring cars appealed more to men who were most commonly head of the household. c. Gasoline powered cars were generally easy to start. d. Gasoline vehicles were much cleaner and quieter to operate. All of the above. Both A and B are correct (= correct answer) 97% of students in the course (32/33) answered this question correctly, indicating that the average student in this course
showed advanced competency in identifying the main points in the article, and the points used by the author to develop his thesis. Students also read and discussed an article by Tainter on the sustainability of complex societies, and then answered this exam question: (2) According to Tainter in the article Sustainability of Complex Societies, for how much of human history have we lived in complex societies? a. About 90% of our history b. About 50% of our history c. About 1% of our history (correct) d. We have never lived in complex societies. 91% of students in the course (30/33) answered this question correctly, indicating that the average student in this course showed advanced competency in identifying a major point used by the author to develop his thesis that during most of human history, we have not lived in complex societies, which tend to be unsustainable over the long term. Students read and discussed an article about governmental responses to climate change, and then answered this exam question: (3) In the reading entitled the “International Response to Climate Change” the author states that ______________ is/are an attempt to distribute the cost and the work of fighting climate change among all the nations of the world. a. Cap and share (correct) b. Walkable urbanism c. The international solar panel rebate program d. Alternative energy subsidies. Both a and c 78.8% of students in the course (26/33) answered this question correctly, indicating that the average student in this course showed intermediate to advanced competency in identifying a major point used by the author to explain how nations are beginning to share the social, environmental, and economic costs of addressing global climate change. Finally, they watched and discussed in class a 1-hour video about the history and social implications of American transportation systems, then answered the following question (although this was a video and not a reading, we include it here because it required similar analytical power to that of interpreting a reading): (4) The video “Taken for a Ride” reveals the disconcerting and little known story regarding the role of the automotive, oil and highway industries (and General Motors in particular) in shaping how Americans travel through and inside this country’s urban environment. Briefly identify and describe two key aspects of this process that were presented in the video. (4 points) Correct answers: • It shows that, before freeways, traffic congestion and air pollution, public transportation was a vital part of the American landscape. • It uncovers General Motors’ role in dismantling streetcar transportation in the 1930’s, and in catapulting the automobile to the center of our national culture; as a campaign, led by General Motors, to buy and dismantle streetcar lines. Across the nation, tracks were torn up, sometimes overnight, and diesel buses placed on city streets. The highway lobby then pushed through Congress a vast network of urban freeways that doubled the cost of the interstate highways, fueled suburban development, and increased auto dependence. (Points received out of 4) 0 1 2 3

4 Student responses (4) (7) (1) (21) Students earned an average of 3.1 of the 4 points possible on this question (range = 2-4 points), demonstrating that the average student had gained advanced competency in analyzing the major points made by the authors in developing their thesis, and the social implications of these points. However, 4 students earned 0 points, so some of them demonstrated no ability in this learning outcome, but they did not represent the majority of students in the course. Overall, student answers on these 4 exam questions about course readings and a video indicate that most of them were able to identify major and supporting points made by authors, thus we assess the competency of the average student in terms of achieving this learning outcome as advanced.

SLO 3: Critiquing an argument effectively. Near the end of this course, we held poster sessions in which students viewed posters that each had created, which described their research findings on the sustainability of current societal practices in energy, transportation, and materials consumption and waste. Students were expected to interview the poster presenters (which rotated each session), read the posters carefully, and take notes on the arguments made by presenters in both written and oral form concerning the sustainability issues addressed. Then on the final exam, students answered this question: (5) Excluding the poster that
you created (or a similar topic), name one of the posters that you viewed, from the HONR 1037 final poster presentations, and describe briefly how each component of the triple bottom line (environmental, social, and economic) was addressed (3 points). What were the author’s conclusions and why are they significant from a sustainability perspective (2 points)? (5 points total) All (33/33) of the students in this course earned the whole 5 points on this exam question, indicating that the average student in this course was advanced in terms of his/her competency identifying and stating the central argument made in each poster, the evidence presented in terms of environmental, social, and economic issues, the consequences from a sustainability perspective, and the context of the argument. SLO 8: Informed and engaged citizenship in the nation and the world. Students answered the following 3 questions on the final exam that pertained to being informed and engaged citizens: (6) The term “unsustainable” describes a state in which: a. The costs of solving new problems are higher than the expected benefit of solving those problems b. When a society is so heavily invested in maintaining the current state of things that it is unable to address new problems c. Both A and B (correct) d. Neither A or B (76%) of students (25/33) answered correctly, showing that the average student had an intermediate to advanced understanding of the complex contexts of problem-solving in societies. (7) An “energy literate” person: a. Is always willing to sacrifice quality of life in order to reduce his or her carbon footprint b. Knows how much energy he or she uses, for what, and where the energy comes from c. Is able to make informed energy use decisions based on an understanding of impacts and consequences d. Continues to learn about energy throughout his or her life e. All of the above. b, c, and d (correct) 94% of students (31/33) answered correctly, indicating that they understood some limitations of social change, and the importance of being informed citizens about energy use issues. (8) Essay Question: Students also were asked to write an essay on the final exam about one of these 2 issues: Option 1: The increased development of mixed-use walkable urban places is critical to the creation of more sustainable communities. Referencing information from this class (lectures, readings, the walkability tour, and films), please describe how the built environment affects our energy usage (both fuel and power) (4 points), climate change (4 points), and public health (4 points), and describe how communities can be better designed to address these issues (3 points). Option 2: List the 3 main types of fossil fuels (6 points) and briefly describe the environmental (3 points), social (3 points) and economic (3 points) impacts in the United States of using fossil fuels. 97% of students (32/33) earned full credit (15/15 points) on this essay question, and one earned 13/15 points. Thus the average student gained an advanced competency in terms of understanding the social, environmental, and economic impacts of their individual actions concerning fossil fuel use and community planning for walkability. Our assessment for this learning outcome also included student scores on grading rubrics for their individual final poster projects on sustainability issues in energy, transportation, and materials consumption and waste. One of the grading rubric categories for the poster was an evaluation of how well each student explained the current and likely future social, environmental, and economic impacts of human practices in these areas (such as fossil fuel energy use, reliance on automobiles for individual transportation, consumption of plastics, excessive packaging of goods, continued use of landfills for most materials waste disposal, etc.). Data from 17 students were collected; out of 10 points possible in this category, the average student score was 9.4 (range = 6–10), which placed most students in the top rubric level of “Impacts well explained and easily understood”. Student posters also were scored in a second category of how well they described sustainable solutions (such as solar energy, recycling, mass transportation, biodegradable packaging, etc.), the potential obstacles to implementing these solutions, and the costs and benefits in terms of society, economics, and the environment (the triple bottom line, TBL). Data from 17 students revealed that out of 15 possible points in this category, the average student score was 14.0, which placed most students at the top rubric level of “TBL clearly addressed, obstacles well explored, costs and benefits well-explained”. From these 5 measures of student performance on exams and poster projects, we conclude that the competency
of the average student in SLO 8 was advanced, in that they appeared to understand well how their personal decisions impact the social, economic, and cultural systems in which they live, were able to analyze systems and relationships in historical perspective, and to recognize their social responsibilities and the complexity of social issues and civic goals (as described in the AU SLO Rubric).

Attachment name:

6. Based on the comprehensive rubric for the appropriate SLO(s), indicate the extent of competency of the average student who has completed this core course in each learning outcome assigned to it:

<table>
<thead>
<tr>
<th>SLO</th>
<th>Level of Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO 2</td>
<td>intermediate</td>
</tr>
<tr>
<td>SLO 3</td>
<td>intermediate</td>
</tr>
<tr>
<td>SLO 8</td>
<td>advanced ability</td>
</tr>
</tbody>
</table>

7. How did you (or will you) use the findings for improvement?

[What questions / issues / concerns did your data raise for the faculty teaching the course? What discussion did the faculty have about the findings? What future actions to improve student attainment of this outcome will the department / program take as a result of this analysis?]

Overall, our assessment showed that the average student in these courses achieved intermediate competency in terms of some measures used in HONR 1027, but advanced competency in all 3 SLOs measured in HONR 1037 and some parts of 1027. In particular, the grading rubrics for the term paper in HONR 1027 may not have adequately assessed student competency in achieving these SLOs, so next year we will add targeted exam questions on particularly SLO 2 and 3 to better assess student competency. Because we became aware of the Auburn University SLO Rubrics for assessment only in May 2013, we were not able during 2012-13 to use these detailed rubrics to design course activities or assessments. Now that we are aware of these detailed rubrics, next year we will design course activities and grading rubrics (especially on exams and final projects) to better assess student competencies in identifying the main ideas, underlying points used to develop the main ideas, and the writer’s assumptions presented in course readings (SLO 2). Also, we will design activities and grading systems to better assess student competencies in identifying the main arguments, assumptions, supporting evidence, consequences, context, and audiences for arguments that we discuss in class (SLO 3). Finally, in terms of SLO 8, because these are sustainability courses, the material we examine is ideally suited to assessing citizenship and student understanding of the complexity of interconnected social, political, economic, and environmental systems, as well as historical perspectives, impacts of their actions on society, and issues of responsibility and engagement. As such, we feel that we already have in place diverse methods to assess student competency for this SLO (exam, projects). We will institute a pre- and post-test system also in HONR 1037, in addition to the one in place for HONR 1027, because it shows how students improve in understanding citizenship issues during the course.

8. Additional Comments:

[What else would you like the Committee to know about your assessment of this course or plans for the future?]

These are honors courses, in which some of the most outstanding freshmen who apply to Auburn each year are enrolled. Thus, it is not surprising that they generally achieved competency at an advanced level in all 3 examined SLOs. We feel that the pre- and post-testing is a very useful assessment method, which we developed for our course after reading reports from other courses that had successfully implemented this
method of student assessment. As such, the online assessment report system allowed us to learn about new methods that we have begun to employ in our courses.

9. Committee Comments: