## PLO# 4: Biology/Faith Integration (Assessed 2013)

Students will be able to a.) describe a bioethical issue, b.) critically respond to one key argument, and c.) frame the issue within the context of Christian belief and scripture.

## Assessment method & benchmarks

Assessing (a) of PLO: End-of-semester questionnaire to Fall Bio-196 class

- 2 faculty reviewed 11 questionnaires & scored the 3 questions on 0-2 point scale; scores were averaged & then added for each student for a maximum score of 6
- Capability Benchmark: 100% of students will have a minimal score of 3

Assessing (b) of PLO: Samples from Fall Bio-196 debate assignment

- 2 faculty reviewed 12 samples of student responses to debate arguments; scored responses on 0-2 point scale; scores were averaged for each student
- Benchmark: 80% of students will score a 1.5 or more

Assessing (c) of PLO: Samples from Spring Bio-196 weekly reading assignment

- 3 faculty reviewed 11 samples of student's attends to provide scriptural framework for a bioethical position they were taking; responses scored on a 0-2 point scale & averaged for each student
- Benchmark: 80% of students will score a 1 or more

## Major Findings

- a.) We did not meet benchmark, as 9/11 (82%) had a score of 3 or more. We were disappointed in answers & believe that since this assessment tool was not embedded in the course, low effort was given. Questionnaire handed out with evaluations on last day of class. Answers overall were rushed & superficial.
- b.) We did not meet benchmark, as 8/12 (67%) had a score of 1.5 or more. We noted that students had trouble distinguishing between an argument and an assertion. We were pleased that students could talk about normative ethical theories & identify the theories from which debaters were drawing.
- c.) We did not meet benchmark, as 8/11 (73%) had a score of 1 or more. Overall, this is a challenging assignment since scripture does not speak directly to most (almost all) of the advanced medical and bioethical issues discussed. Students understandably struggle to make these more indirect connections themselves.

## Closing the loop

- Instructor will talk more about argument vs. assertion in the lower-division required course Bio-006; we can then enforce ideas through our other courses which include bioethical discussions.
- We will invite Philosophy professors (e.g. Mark Nelson or Steve Zilstra) to a Biology department meeting in Fall to lead our department in a discussion of argument vs. assertion (COMPLETED).
- Instructor will continue to open semester with a class discussion on Verhy's book modeling how you can use scripture to provide guidance on bioethical issues, but he will direct the discussion himself in the whole class rather than breaking into small groups. He will also rehearse more what is expected from students in this area.