

## Assessment Reporting

### AY 2008/09

*As you now know an interim report on the assessment of student learning is due to WASC in fall of 2010. We have been asked to demonstrate that we are using assessment data to improve student learning (i.e., “closing the assessment loop”) and that the assessment process is sustainable. To that end, we are asking programs to report on their most complete student learning outcome (SLO) during this reporting cycle. Please identify your selected SLO in the box below and provide the requested information.*

<b>Degree Program:</b>	MSAE	<b>Academic Year:</b>	2008 - 2009
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**MSAE Student Learning Outcome (SLO) #1**

*Ability to apply mathematics appropriate for graduate level and the problem being solved.*

**1.1 Data Collection:**

[FALL 2008 / SPRING 2009] – For this assessment cycle, how were the data collected and what were the results?

*Five MSAE project / thesis reports were evaluated during this academic year. Three (3) of them were found “adequate” and two (2) were found “good” in regards to this outcome.*

*It should be noted that students are not assigned passing grades in their AE295 / AE299 courses unless they demonstrate at least adequate performance in this outcome.*

**1.2 What have you learned about this Student Learning Outcome?**

[FALL 2008 / SPRING 2009] – Based on the results in part 1.1 above, briefly summarize the discussion surrounding this outcome, i.e., what does the faculty conclude about student learning for this SLO?

*AE faculty have agreed that appropriate application of mathematics in every MSAE project or thesis and satisfactory student performance in this outcome, should be a requirement for a student to receive a passing grade in AE295 / AE299. Hence, students were coached accordingly and all MSAE projects and theses supervised by full-time AE faculty met this outcome in AY 08-09.*

**1.3 Action Items(s) (if necessary):**

[FALL 2008 / SPRING 2009] – Based on the discussion in part 1.2 above, what actions will the department take to improve student learning, e.g., program changes, changes in pedagogy, process changes, resources requests, etc?

*A full-time AE faculty member will coordinate AE 295 / 299 in AY 09-10. Students will be reminded of this requirement at the beginning of their project / thesis and coached as necessary throughout their work to ensure that their projects / theses include a relevant and appropriate application of advanced mathematics. Furthermore, students will be reminded of the expectation to have this component clearly documented in their final reports.*

## 1.4 Results of Action Items

[FALL 2008 / SPRING 2009] – What does assessment of student learning show after implementation of any action items? What, if anything, is planned next?

*Typically, MSAE projects / theses show strengths in one or more outcomes, while being weak or adequate in others. For this particular outcome, a minimum level of performance has been identified hence, all students who receive passing grades must meet this minimum level. The next step is to challenge students to perform at a higher level in applying mathematics to the solution of AE problems. A clear articulation of standards is not easy, as the level of mathematics required to solve an AE problem depends on the particular problem. The AE faculty are currently working on such an articulation.*