

Outcomes Assessment, Math 382, Advanced Calculus II

The outcomes were to

“Be able to use the basic proof techniques including direct proofs, indirect proofs, and mathematical induction, and

“Be able to construct counterexamples, in each of the following areas, to conjectures that are actually false even though they look plausible and resemble given results.” [These two objectives are followed by a list of areas to which they apply.]

Nine Mathematics Option majors took Advanced Calculus II, M 382, Spring 2012. The outcomes to be assessed all concerned proofs and counterexamples. Six problems on the final exam were used to assess proofs and five were used to assess counterexamples. Using the Mathematics Option Assessment Plan rubric, among those nine students, eight performed at an excellent or acceptable level at proofs and one was marginal. Five performed at an excellent or acceptable level at counterexamples, three were marginal and one unacceptable.

These results have been communicated to the faculty and, where necessary, will be discussed at a faculty meeting.