

**Annual Assessment: B.S. in Mathematics – Mathematics Option.
M450
AY 2013-2014**

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This report summarizes an assessment of M450-451 with regard to the Applied Mathematics Option and the rubrics

(Outcome 1) Rigorous mathematical reasoning
(Outcome 2) Setting up Mathematical models

Preamble: M450 is part of a senior sequence M450-451. In accordance with the departmental plan the rubrics noted above were assessed. M450 had a total of 35 students in Fall 2013. Of those 23 students were pursuing a Mathematics degree. Of those, 16 were seeking a degree with the Mathematics Option, 6 with the Applied Mathematics Option and one with the Mathematics Teaching Option. Only the students pursuing a Mathematics option were assessed.

Data Collection: Final exams and assignment performance were used to assess the 14 Mathematics Option students for both outcomes. Only student performance on dimensional analysis problems (HW 2) could be used to (marginally) assess Outcome 2. Three students dropped the course. And were not included below. Their performance was poor before they dropped.

Scores:	<u>Exceptional</u>	<u>Acceptable</u>	<u>Marginal</u>	<u>Unacceptable</u>
Outcome 1	4	9	0	0
Outcome 2	6	8	1	0

Recommendation:

Though the course does involve the analysis of certain mathematical models the students are not required to “set them up”. We recommend future assessment in the category Outcome 3 in place of Outcome 2. It might also be more efficient to assess all B.S. options rather than just the Mathematics Option. Lastly, the results do not suggest any major change to the curricula or delivery method.