Annual Assessment: B.S. in Mathematics – Applied Mathematics Option.
M450-M451
AY 2011-2012

Assessment Coordinator: Mark Pernarowski

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: The current (first) assessment plan was not in place until mid spring 2012, well after M450 finished. Consequently no useful data related to that course could be collected and scores below are listed as N/A.

Data Collection: In Spring 2012, Applied Mathematics II with rubric M451 had a total of 17 students enrolled. Of these, two were pursuing an Applied Mathematics Option. For the assessment copies of the Midterm and Final examinations were used.

Scores:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Outcome 1</th>
<th>Outcome 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>M450</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>M451</td>
<td>Acceptable</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Outcome 2 could not be assessed since students were not required to “Set up” any mathematical models. The majority of data collected required a high degree of rigorous mathematical reasoning. On the whole the performance was acceptable but not outstanding.

Recommendation:

Though the course does involve the analysis of certain mathematical models the students are not required to “set them up”. We recommend Outcome 3 instead be assessed next time. This concerns selecting appropriate techniques for analysis. These results and recommendations have been communicated to the faculty and, where necessary, will be discussed at a faculty meeting.