Expected Outcome 1: Students should be able to go communicate effectively within their area of expertise

Students are expected to communicate their research or thesis projects effectively and with the use of proper visual aids

Assessment Method 1: Exit seminar evaluation form

Assessment Method Description

All MS/MAq students are required to present their research or thesis project in a professional manner to an audience that includes faculty, graduate and undergraduate students. Data presented here include MS/MAq students who graduate in Fall 2013 and Spring 2014. Faculty members (that are not members of the student committee) evaluate the student presentation using a standard evaluation form. Students are judge based on the following criteria:

- Presentation of methods
- Presentation of conclusions
- Delivery
- Visual aids
- Overall clarity
- Fielding questions

Findings

On average, all MS/MAq students (n=11) demonstrate good oral communications in their area of expertise with >8.0 in all areas assessed (10 being excellent). Student presentations were assessed by at least 2 faculty members with an average of 6 evaluations per student.
<table>
<thead>
<tr>
<th>Question</th>
<th>Average points (1-10)</th>
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</thead>
<tbody>
<tr>
<td>Definition of research problem</td>
<td>8.5</td>
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<tr>
<td>Presentation of methods</td>
<td>8.4</td>
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<tr>
<td>Presentation of results</td>
<td>8.3</td>
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<td>Presentation of conclusions</td>
<td>8.2</td>
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<tr>
<td>Oral communication skills</td>
<td>8.3</td>
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<tr>
<td>Visual aids</td>
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<td>Overall delivery</td>
<td>8.4</td>
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<tr>
<td>Fielding questions</td>
<td>8.4</td>
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</table>

Specific comments regarding their communication skills including the following:

- too much text on the slides
- nervous, speak too fast
- need to relax
- seminar was too long
- use technical words when presenting scientific data
- not enough background on the topic

**How did you use findings for improvement?**
Results showed that our MS/MAq students are able to effectively communicate their research and thesis projects to an audience of faculty. Results are above our expectations for MS/MAq students. All comments made by the faculty (over 65 evalutions) were very positive. No action is proposed at this time.

**Additional Comments**

**Expected Outcome 2: Students should be able to understand the scientific method**
Students are expected to understand the scientific method and apply it in their area of expertise

**Assessment Method 1:** Graduating graduate student survey, Office of Institutional Research and Assessment
**Assessment Method Description**

The Graduating graduate student survey was completed by students at the time of their application for graduation (2013-2014). Question number 8 (*How many peer reviewed conference papers or posters (single or co-authored) did you present during the period of your graduate studies at Auburn University?*) was used to assess if students were capable of applying the scientific method to their area of expertise.

**Findings**

Thirty one percent of our MS/MAq graduates did not presented a peer-reviewed communication before graduation. Therefore, we cannot assess if they were capable of applying the scientific method to their research or not. Conversely, 69% of the students presented their research at one or more scientific meetings. We believe this is a good measure for how they applied the scientific method to their research but we would like to raise the percentage to 100%.

**How did you use findings for improvement?**

Results from this survey will be discussed at our next faculty meeting (August 1, 2014). Faculty will be advised to encourage their MS/MAq students to submit abstracts/communications to scientific meetings in their area of expertise.

**Additional Comments**

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**Expected Outcome 3: Students should be able to write effectively within their area of specialization**

Students are expected to produce a written scholarly output during their MS/MAq program. Scholarly outputs include: abstracts to scientific meetings, technical reports, extension papers, peer-reviewed scientific papers, etc...

**Assessment Method 1:** Students are requested to submit their CV before graduation to the faculty member in charged of organizing the exit seminars.
Assessment Method Description
Peer-reviewed publications, submission of abstracts to scientific meeting and other scholarly contribution in which students were required to write about their research qualified as proof of their written abilities

Findings
Based on reviewed CVs (n=11), all our MS/MAq students successfully produced a written piece prior graduation.

How did you use findings for improvement?
Our objective was achieved and no further action is proposed at this time.

Additional Comments