Quantitative Reasoning Curriculum Review Committee (QRCRC) Report to the UVM Faculty Senate

May 14, 2018

This report summarizes the work of the UVM Quantitative Reasoning Curriculum Review Committee (QRCRC) during the 2017-2018 academic year.

1. Participation and Representation

The QRCRC was comprised of two representatives from the College of Arts and Sciences, one representative from the College of Education and Social Services, and one representative from the College of Engineering and Mathematical Sciences. We also had a student representative from the Student Government Association.

The committee met twice each semester to discuss assessment, long-term plans, policies, and the “General Education at UVM” web-site.

2. New Proposals for Quantitative Reasoning Courses

Each course proposed for approval must meet at least four of the six proficiencies, outlined below, under “Quantitative Reasoning Proficiencies.”

Quantitative Reasoning Proficiencies
- Interpreting data represented in a variety of ways, such as graphs, tables, and charts
- Solving problems, through the use of patterns, numbers, and symbols
- Evaluating the value and validity of provided information
- Determining if the solution to a problem makes logical sense in the real world
- Formulating alternative solutions
- Communicating effectively the thought process used to interpret and solve the problem

Proposals must include a brief description of how the course meets the stated proficiencies outlined at the end of this guide.

Quantitative Reasoning Course proposals must include the following elements:
- Course Action Form, entered in the University's CourseLeaf system
- Course Syllabus, attached to the CourseLeaf submission.

Only three-credit or four-credit courses will be approved as Quantitative Reasoning courses. Courses being reviewed for Quantitative Reasoning approval can be offered either face-to-face, online, or as a hybrid course, as the QCRC has no requirement related to specific pedagogical approach.

The chair first read each request for a course to be QR-designated. The committee members had agreed that any requests that clearly met our requirements for such designation could simply be
approved by the chair. The chair would then notify the other committee members of the decision.

Requests that were not obvious were sent to each committee member for comments. Once all members had the opportunity to respond, a decision was reached. Full support of each decision is mandatory. In only one case was discussion necessary.

We found the streamlined approval process through CourseLeaf excellent!

### UVM QR-Designation Requests and Decisions

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<thead>
<tr>
<th>Year</th>
<th>Class</th>
<th>Approved or Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2018</td>
<td>ANTH 113/LING 164: “Introduction to Semantics”</td>
<td>Approved</td>
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<tr>
<td></td>
<td>CS 237: “Intro to Numerical Analysis”</td>
<td>Approved</td>
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<td></td>
<td>CS 288/STAT 288: “Statistical Learning”</td>
<td>Approved</td>
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<td>EE 106: “Embedded Programming in C”</td>
<td>Approved</td>
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<td>HCOL 86: “Knowledge &amp; Age of Big Data”</td>
<td>Approved</td>
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<td></td>
<td>STAT 51/95: “Stat &amp; Social Justice”</td>
<td>Approved</td>
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### 3. Transfer Credits for Quantitative Reasoning Courses

Each course proposed for approval must meet at least four of the six proficiencies, outlined below, under “Quantitative Reasoning Proficiencies.” Proposals must include a brief description of how the course meets the stated proficiencies outlined at the end of this guide.

Quantitative Reasoning Proficiencies
- Interpreting data represented in a variety of ways, such as graphs, tables, and charts
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The QRCRC received three petitions for transfer-credit equivalent courses for QR-designation. One was from the Community College of Vermont, which was approved; another was from Thomas College, which was rejected; and the final was from the University of North Carolina in Greensboro, which was approved.
Transfer QR-Designation Requests and Decisions

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<th>Approved or Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2018</td>
<td>Community College of Vermont’s MAT 1030: “Applied Math Concepts”</td>
<td>Approved</td>
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<tr>
<td></td>
<td>Thomas College’s MS 120: “Foundations of Quantitative Analysis”</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>University of North Carolina’s STA 108: “Elementary Introduction to Probability and Statistics”</td>
<td>Approved</td>
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4. General Education Coordinating Committee

Our committee members welcomed the involvement with the General Education Coordinating Committee, a subcommittee of the Faculty Senate’s Curricular Affairs Committee. Although the General Education committees each vary in composition and mission, the overall goal of each is to oversee clear and fair requirements to each UVM student. Being knowledgeable about the work of the other committees helps us stay in line with the overall goal of all General Education requirements.

5. Quantitative Reasoning Assessment

This is our first time assessing our requirement. We look forward to compiling our results and to adjusting both the format and the contents of our assessment tool.

6. Quantitative Reasoning General Education Web-Site

We are very happy with the results of this web-site. We agree that having the format the same for each requirement will help all navigate the site. We appreciate the efforts of all involved to provide this site to our students and their families.

7. General Education Marketing

We look forward to working with our student representative to spread the word about the value of General Education at the UVM. We should all be proud of the education each of our students receives. Flexibility in moving from program to program at UVM should be something we publicize, especially since so many of our students change majors and colleges within UVM.

The QRCRC members enjoy our time together and are happy that our efforts have provided the university with a well-functioning Quantitative Reasoning requirement.
Report submitted by Joan Marie Rosebush, 2017-2018 Chair, QRCRC, on behalf of 2017-2018 QRCRC members:

**Lia Cravedi:** College of Education and Social Services

**Judith Christensen:** College of Arts and Sciences

**Joan Marie Rosebush:** College of Engineering and Mathematical Sciences

**Larry Rudiger:** College of Arts and Sciences

**Cameron Schiller:** Student Government Association representative, student in College of Education and Social Services and College of Engineering and Mathematical Sciences.