

**Quantitative Literacy ESLO Committee**  
**Annual Report for Academic Year 2016-2017**

**Members of the Committee:**

- Randall Paul (chair)
- Kari Lundgren
- Richard Bailey
- Tara Guthrie
- Gregg Waterman
- Terri Torres

**Responsibilities of the Committee:**

The committee is responsible for enunciating the Quantitative Literacy Essential Learning Outcome as well as giving detailed criteria for describing the various specific aspects of Quantitative Literacy. Our over-arching goal has been to help implement Quantitative Literacy as a learning outcome for all OIT students. A large part of our effort has been in developing tools and conventions for assessing whether a given course has QL content. This has included developing forms and a rubric, but more importantly communicating with professors how to recognize and categorize the QL content in their class.

**Committee Activities:**

Fall Term Kari Lundgren and Randall Paul gave a talk in the 2016 Pre-convocation Teaching Workshop in which we showed how the QL criteria could apply to problems in a specific class. This led to a very productive discussion with the professors who attended. With these discussions in mind the QL committee decided to amend the Communication criteria and our rubric.

Our first major order of business was to refine the process by which courses are tagged as having QL content at the foundational or required practicing level. We began by re-working existing applications for the foundational courses Math 361 and Math 243 so that they satisfied the newer application process. After approving the new Math 361 application, we solicited an application for MGT 345 (Engineering Economics) from committee member Richard Bailey.

These discussions were very productive, and led to a much better understanding of what, precisely, we needed from an application. We then proceeded to solicit applications from outside the committee, in particular Economics 201/2 and MGT 321 (Personal Finance). We also received an application for MIS 375 (Decision Support Systems). We then discovered that the guidelines we had thought so clear to people who had been present on the committee for the discussion, were not so clear to people off of it. The communication criterion was particularly problematic, and generated a lot of discussion.

Winter Term We decided to bring the authors of the ECO 202 and MGT 321 applications in for face to face discussions. This resolved most of the issues, and both of these courses were slated for approval with very minor changes. While we were concerned that such a lengthy process may not be feasible when approving a large number of courses, the discussions were so useful and clarifying that we thought it well worth the effort at this early point in our application development process.

The committee decided not to approve MIS 375, not because it did not have good QL content, but because it seemed more focused on the specific discipline of management. This seemed to us more of a Program-Integrated practicing course. We noticed that a prerequisite for this class, Math 371 (Finite Mathematics), included both the QL content and had the broad application that we were looking for in a Required Practicing course. We solicited an application for this course.

Spring Term The committee finally approved Eco 202 and MGT 321, as well as Math 243 (which had somehow avoided approval earlier). We also considered and approved Math 371.

We discussed and answered a set of questions posed by various departments to GEAC. The most contentious of these was the consideration of Math 465 (Mathematical Statistics) as a potential foundational QL course. The committee decided to reject this idea for reasons detailed elsewhere. A number of other potential required practicing courses were suggested, but the only one we felt really met the requirements of both QL content and broad application was ACC 201 (Principles of Accounting). Applications for ACC 201 and a revision to the application for MGT 345 were solicited, but are still pending.

We also discussed appropriate requirements and/or credits for the proposed Interstate General Education Passport. It was felt that, ideally, the passport should include both the foundational and required practicing courses. However, we suspected that most institutions will only require one course, the foundational statistics course. It was also feared that many institutions will offer Math 111 (College Algebra) as the QL requirement. This could be problematic as the committee specifically rejected Math 111 as a required practicing course because of its focus on program specific goals and its lack of application in the civic and personal context. This issue remains unresolved.

### Accomplishments

The principal goals for the committee at the start of the year were first to establish and thoroughly pilot our application process. Second, we wanted to approve a complete list of QL foundational and required practicing courses. While there remain a very few courses for which we did not complete the application process, we feel that the list is essentially complete at this point. We also feel that we have the application process sufficiently refined that we can start to use it for program-integrated QL classes in the Fall, if a “class approval” model is, in the end, used.