To: The faculty of Westmont College
Date: 9/23/2009
Re: MA 005: Elementary Statistics

On March 9, the General Education Committee approved the de-listing of MA 005: Elementary Statistics as fulfilling the Reasoning Abstractly GE requirement. MA 005 will continue to fulfill Quantitative and Analytical Reasoning GE requirement. This change was immediately communicated to students in multiple ways, but we suffered a significant breakdown in communication with the faculty. For this I sincerely apologize and the committee is working on establishing procedures to prevent this type of failure in the future.

For those who are interested, I have included an account of the process by which the GE Committee arrived at its decision below. My primary purpose in this memo, however, is to address the communication problems surrounding the change.

Potentially affected students were informed of the change before spring registration for this fall’s term. Specifically, an email notice was sent to each student who had not already fulfilled the Reasoning Abstractly GE requirement. After registration, an email was sent to each student who had registered for MA 005. Before the fall semester, another round of emails was sent to incoming students and to students registered for MA 005.

In sharp contrast, communication with the entire faculty did not occur. I take responsibility for this failure. In particular, I did not pay enough attention to the recipient lists of the emails mentioned above as well as multiple additional emails between small groups of faculty members. In my careless reading, I assumed a much wider circulation than was actually the case. Most notably, the accompanying guide to Abstract Reasoning courses in the Mathematics department developed by the Mathematics Department to aid faculty in advising students in the changed context was only sent to only a very few people. Again, I apologize for this communication failure.

The GE Committee is currently in the process of drafting a set of procedures to avoid similar problems in the future. The procedures will address communication with potentially effected departments both prior and subsequent to delisting a course and
will provide for a delay between the time a decision is made and the change is implemented.

Thank you for your gracious understanding,
C. Ray Rosentrater
Attachment: Guide to Abstract Reasoning Courses in the Mathematics Department

A short history of the change for those who are interested
While from the outside the de-listing of MA 005 may seem sudden, it was actually the result of a long process dating back to 2002 when the course was first submitted to fulfill Reasoning Abstractly. At that time, the submission proposal itself indicated that the course was marginal for fulfilling Reasoning Abstractly. “Whether this course qualifies for inclusion as one suitable for abstract reasoning category is a close call. … it does not engage in abstract proofs …”

Since the time of the original submission, several changes have occurred.
1. The review process for submitted courses has become more careful.
2. Draft SLOs (student learning outcomes) have been developed for Reasoning Abstractly.
3. Assessment has been conducted in Reasoning Abstractly courses.
4. The approach to the course material has shifted to involve even less abstract reasoning.
5. The prevailing statements of pedagogy explicitly and firmly support this shift to a more concrete and applied approach.

The process of assessment this past year brought these issues to the surface and resulted in multiple conversations in the Mathematics Department. Some MA 005 instructors clearly stated from the beginning that instruction in abstract reasoning was not occurring in their sections and were unhappy that there were expectations they were not fulfilling. One instructor felt that, though marginal, the course probably did contain sufficient abstract reasoning. The instructor most oriented toward an abstract reasoning approach was challenged to provide specific examples of how abstract reasoning was addressed in these sections. Even the instructor involved agreed that the resulting list was thin and many of the examples seemed forced. As a consequence, the Mathematics Department forwarded a request to the GE Committee that MA 005 be de-listed as fulfilling Reasoning Abstractly.
The GE Committee first took up the issue on February 9. After an initial discussion, the item was tabled while relevant data on other available Reasoning Abstractly courses, their enrollments, majors that included MA 005, and courses for which MA 005 was a prerequisite could be collected. This information was considered at the February 23 meeting of the GE Committee. This meeting concluded communicating a request to the Mathematics Department to consider ways in which the course could be modified to include sufficient abstract reasoning to meet the area standard. (This likely would have resulted in a situation where only the Westmont offered version of statistics would have fulfilled the Reasoning Abstractly requirement.) The department chair was asked to attend the next meeting of the GE Committee.

The Mathematics Department took the charge seriously and spent a significant amount of time considering ways to add additional abstract reasoning to the course. The discussion ended with the conclusion that

1. The consensus in the field of statistics is that it would not be a good course if abstract reasoning content were added.
2. MA 005 is already very full and it would be necessary to eliminate existing content to make room for abstract reasoning content. The department is already struggling to get through the existing content.
3. Abstract Reasoning is not what the course is about.

At the March 9 meeting of the GE Committee, the chair of the Mathematics Department presented the department’s conclusions and answered questions from committee members. The chair of the Mathematics Department was excused and the committee continued the discussion. At the end of the discussion,

1. It was agreed that the MA 005 should be de-listed from Abstract Reasoning.
2. The Mathematics Department was asked to develop a guide to Abstract Reasoning courses in the Mathematics Department for academic advisors to use.
3. The Mathematics Department was asked to modify MA 004 so that it would fulfill Quantitative and Analytical Reasoning in addition to Reasoning Abstractly.