

**Curriculum Committee
Form A: Discipline Summary**

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UMM
Curriculum Committee
Form A

Rev: 04/2005

Date: Sept 4, 2008

Discipline/Division: Math/Science and Math

Catalog Years (e.g., 2007-2009): 2009-2011

Statistical Summary of Proposed Changes:

(a)	(b)	(b) – (a)
Present (from current catalog)	Proposed (for new catalog)	Net Change*
13	14	+1
48	52	+4
6	6	0
26	26	0
11	12	0
11		
16	16	0
10		
3	3	0

The Major

Total courses required for a major*:

Total credits required for a major*:

The Minor

Total courses required for a minor*:

Total credits required for a minor*:

Entire Discipline

Total 1xxx and 2xxx courses listed in the catalog**:

Total 1xxx and 2xxx courses taught last year**:

Total 3xxx and 4xxx courses listed in the catalog**:

Total 3xxx and 4xxx courses taught last year**:

Number of courses with no General Education designator**:

*Includes required courses from other disciplines.

**Does not include Directed Studies or Senior Honors Projects. Courses with multiple sections count only once.

Please summarize the intent of the proposed changes.

Adding the computer science requirement to the math major increased the total credits and courses required for the major. The discipline feels our students should have exposure to computing.

The number of courses at the 1xxx level has increased by 1 due to splitting Math 1011 Precalculus into two courses.

- Precalculus covers too much material too quickly for even the better students to get the most out of the course.
- Many students who earn a D in Precalculus could do much better if they had more time to work on the material. These students would also be better served by taking Survey of Calculus rather than Calculus I.
- We have roughly 125 student in Calculus I in a year, but only 15 in Survey of Calculus. It would be beneficial if we could balance that better.
- Students who need a Precalculus course to prepare for Survey of Calculus do not need to study trig since Survey of Calculus has no trig.
- Some students only need a trigonometry refresher to prepare for Calculus I.
- The new courses will include more applications than the previous precalculus course.

What are the financial or staffing implications of this proposal for the Discipline?

No change.

In 2008/09 the course Math 1011 Precalculus had 3 sections in the fall and 1 section in the spring for 16 credits total. The 3 sections this fall have caps of 35 students, and currently there are 76 students enrolled across the three sections.

In 2009/10 we will offer 3 sections of Math 1012 Precalculus I: Functions (2 fall, 1 spring) and 2 sections of Math 1013 Precalculus II: Trigonometry (1 fall, 1 spring) which is a total of 16 credits for the year.

If more sections of the 2 credit Trigonometry course are needed in the fall, we can accommodate adding another section under the discipline's current teaching loads.

What are the financial or staffing implications of this proposal for other Disciplines?

During the past five years, at every level (from soph, jr, to sr), there have been as few as 9 math majors and as many as 16. Enrollment in four 1xxx level computer science courses should increase by 9 to 16 students (distributed across the four courses).