

**Rowan University
Department of Mathematics**

Minor Curricular Change

**Changing Prerequisites and Catalog Description for
Calculus I**

1. Details

- a. Change requested:

Remove Precalculus as a prerequisite for 1701.130 Calculus I. Change catalog description for 1701.130 Calculus I.

- b. Sponsor: Curriculum Committee, Mathematics Department

2. Rationale

- a. Statement of “need” for such a change:

Starting in the Fall of 1998, students will not be able to register if they have not fulfilled the course prerequisites. The above course has a prerequisite that can be satisfied in high school. Since the registration system does not check courses taken in high school, it is appropriate to eliminate the prerequisite for the above course. However, it will be indicated in the catalog description that students are expected to have completed an equivalent of 1701.122 Precalculus.

- b. Statement of curricular effect:

None

3. Results of Consultation

The above is approved by the Curriculum Committee of the Mathematics Department.

New Catalog Description

1701.130

4 s.h.

Calculus I

This course begins with a discussion of functions, the limit concept and continuity. The concept of a derivative is introduced and the student learns to differentiate polynomial functions, rational functions, algebraic and trigonometric functions. Differentiation is applied to extreme problems and to problems in related rates. The integral as the unit of a sum is linked to the antiderivative by the Fundamental Theorem of Calculus and used to find areas, volumes and arc length. A graphics calculator is required for this course. Students are expected to have completed an equivalent of 1701.122 Precalculus.