## UNDERGRADUATE COURSE CHANGE

 GENERAL EDUCATION
## Proposal for a Course Change

Department_MATH/CS Submission Date_12/15/09
Semester of Implementation_ Fall 2010
I. Proposed Course Change Information

|  | CURRENT | Check Box if No Change | PROPOSED CHANGE |
| :---: | :---: | :---: | :---: |
| Discipline Prefix | MATH | 区 | - |
| Course Number | 164 | 区 | - |
| Course Title | Precalculus | ® | - |
| Credit Hours | 3 | $\square$ | 4 |
| Prerequisites | None. | $\square$ | Passing an algebra readiness test. |
| Speaking Intensive | - | $\square$ | - |
| Writing Intensive |  | $\square$ | - |
| If Cross-Listed: |  |  |  |
| Secondary Prefix | - | $\square$ | - |
| Course Number | - | $\square$ | - |

Current Course Description:
A study of polynomial, rational, exponential, logarithmic, and trigonometric functions and conic sections in order to prepare the student for calculus. 3 credits.* Fulfills Goal 5.

## Proposed New Course Description (Must match description on course syllabus):

A study of polynomial, rational, exponential, logarithmic, and trigonometric functions; conic sections; and their applications in order to prepare the student for calculus. Prerequisite: Passing an algebra readiness test. 4 credits.*
$\square$ Delete Course from Catalog
$\square$ Submit Course to Storage

General Education Goal(s) for which course is designed: $\quad 5$ (Note: this proposal would remove the course from satisfying Goal 5 and allow students who complete the course to be exempt from Goal 5.)

Does the proposed change affect how the course will satisfy the nine (9) required General Education Course Criteria (page 11)? $\square$ Yes $\boxtimes$ No If yes, please explain. $\qquad$
Please attach a proposed syllabus in SACS format that contains proposed changes.
II. Required for Major, Minor, Concentration (please specify):

Liberal Studies (required for middle school; option for elementary school)
III. Rationale for Proposed Changes:

In order to ensure that students entering Math 164 have the appropriate level of algebra skills to succeed in the course, we will require students to pass an algebra readiness test. Students have the opportunity to self-remediate until a passing score is achieved. The increased credit in Math 164 will allow us to devote more time to the study of each of the areas in the course description. Additionally we will introduce more applications to each of the areas, reinforcing students' skills in these topics and in algebra. We are also removing this course from satisyfing Goal 5 because that goal is designed for a 3 credit course. Changing Math 164 to a 4 -credit course goes against this requirement, and allowing a 4credit course in a 3 credit goal would set a precedent that a course with an arbitrary number of credit hours could satisfy any goal. Because the course content will not fundamentally change, and because we will have the chance to offer further applications, we believe that a student passing the course will have shown an understanding of mathematical thought and the ability to conceptualize and apply mathematical logic to problem solving.
IV. Resource Assessment, if change warrants it:
A. How frequently do you anticipate offering this course?
B. Describe anticipated change in staffing for the course:
C. Estimate the cost of new equipment required due to change:
$\qquad$
D. Estimate the cost of and describe additional library resources:
E. Will the change in the course require additional computer use, hardware or software?
$\square$ Yes $\square$ No If yes, please describe and estimate cost:
$\qquad$
F. Will a new or changed course fee be assessed? $\square$ Yes $\square$ No If yes, the Fee recommendation worksheet must accompany this form. It can be found at the following url: www.longwood.edu/budget (See Appendix B for sample of form.)

# SIGNATURE PAGE 

## UNDERGRADUATE COURSE CHANGE

## GENERAL EDUCATION

Course Name/Number Math 164
Course Title Precalculus
V. Approvals

| Date received | Date <br> approved |
| :--- | :--- |

Signature

1. Department Curriculum

Committee Chair
2. Department Chair

The Department Chairs whose programs may be affected have been notified:
Department_Chemistry and Physics_Date Notified12/18/09
Department Liberal Studies Date Notified1/4/10
Department Accounting, Economics, Finance, and Real Estate_Date Notified 3/18/10
3. College Dean
4. College Curriculum

Committee
5. General Education

Committee
6. Educational Policy Committee
7. Faculty Senate Chair
8. Date received by

Registrar
$\qquad$
$\qquad$
$\qquad$

