General Education Committee

**Ogden College of Science and Engineering
Department of Mathematics and Computer Science
Proposal to Make Multiple Revisions to a Course
(Action Item)**

Contact Person: Dr. Ferhan Atici   ferhan.atici@wku.edu   745-6229

1.   Identification of course:
  1.1   Current course prefix and number: MATH 126
  1.2   Course title: Calculus and Analytic Geometry I
  1.3   Credit hours: 4.5

2.   Revise course title:
  2.1   Current course title: Calculus and Analytic Geometry I
  2.2   Proposed course title: Calculus I
  2.3   Proposed abbreviated title: Calculus I
  2.4   Rationale for revision of course title: The proposed title for the first course in
            calculus conforms with the title used at many other major institutions.

3.   Revise course number:
  3.1   Current course number: MATH 126
  3.2   Proposed course number: MATH 136
  3.3   Rationale for revision of course number: The department is adopting a numbering
            system for its courses in which the tens digit indicates the specific mathematical
            area of the course. The numbers 30-39 will be for calculus courses.

4.   Revise course prerequisites/corequisites/special requirements:
  4.1   Current prerequisites: Four years of high school mathematics, including Algebra
            II, geometry, and trigonometry, and satisfactory score on Math Placement Exam;
            or MATH 117 or MATH 118, with grade of C or better.

  4.2   Proposed prerequisites: Four years of high school mathematics, including Algebra
            II, geometry, and trigonometry, and satisfactory scores on Math Placement Exam
            and Math Placement Trig Exam; or MATH 117 or MATH 118, with grade of C or
            better.

  4.3   Rationale for revision of course prerequisites: Skill in trigonometry is necessary
            for success in calculus. Students who cannot demonstrate such skill through a
            satisfactory score on the MPTE would benefit from enrolling in MATH 117 prior
            to studying calculus.

  4.4   Effect on completion of major/minor sequence: None. Students who do not have
            the required skills in trigonometry are often required to repeat the first calculus
            course.

5. **Revise course catalog listing:**

    5.1   Current course catalog listing:

    This is the first of a sequence of courses which present a unified treatment of plane and solid analytic geometry and differential and integral calculus. (Graphing calculator required.)

    5.2   Proposed course catalog listing:

    A course in one-variable calculus including topics from analytic geometry. Limits, derivatives, integration, and applications of polynomial, rational, trigonometric, and transcendental functions. Includes lecture and recitation. (Graphing calculator required.)

    5.3   Rationale for revision of course catalog listing: The proposed listing describes the content and emphasis of the course in greater detail. The department also will deliver the course on a lecture//recitation schedule similar to that of many other institutions.

6. **Revise course credit hours:**
    6.1   Current course credit hours: 4.5
    6.2   Proposed course credit hours: 4
    6.3   Rationale for revision of course credit hours: The change to 4 hours will make the course conform with Calculus I courses at most other major institutions and eliminate problems for students who wish to transfer calculus credit to or from WKU.

7. **Proposed term for implementation: Fall 2010**

8. **Dates of prior committee approvals:**

    Mathematics and Computer Science   04/10/2009
    Department
                                                        05/07/2009
    Ogden Curriculum Committee

    Professional Education Council

                                                        05/08/2009
    General Education Committee

Undergraduate Curriculum Committee   _____

University Senate   _____

Attachment: Course Inventory Form