

Proposal Date: 02/12/2013

**Ogden College of Science and Engineering
Department of Mathematics
Proposal to Create a Temporary Course
(Information Item)**

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1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: MATH 123
- 1.2 Course title: Mathematical Applications for Business
- 1.3 Abbreviated course title: Mathematical Apps for Business
- 1.4 Credit hours and contact hours: 3.00
- 1.5 Schedule Type: L
- 1.6 Prerequisites: Math ACT score of 22 or better or Math SAT score of 510 or better or a score of 14 or better on the WKU Math Placement Exam or a score of 14 or better on the KYOTE or a score of 50 or better on the COMPASS (College Algebra domain).
- 1.7 Course description:
Graphing and problem solving are integrated throughout the study of algebraic concepts including polynomial, rational, exponential and logarithmic functions. Topics also include mathematics of finance, introduction to probability, and derivatives, with emphasis on applications in business-related fields. Not accepted for credit toward a mathematics major or minor.

2. Rationale:

- 2.1 Reason for offering this course on a temporary basis: Students in business and management studies at WKU often wish or need to acquire skills in college algebra with an emphasis on business applications. Such students also need a brief introduction to derivatives as they apply to business, e.g. minimizing cost or maximizing profit. In order to accommodate students registering for Fall 2013, the mathematics faculty requests a temporary course offering for that semester. A new course proposal for Math 123 will follow shortly.

2.2 Relationship of the proposed course to courses offered in other departments: No other course of this nature exists within the University's other departments.

3. **Description of proposed course:**

3.1 Course content outline (each unit will contain business applications):

- Algebraic concepts
- Linear equations and functions
- Quadratic and special functions
- Exponential and logarithmic functions
- Mathematics of finance
- Derivatives
- Introduction to probability

3.2 Tentative texts:

Mathematical Applications for the Management, Life, and Social Sciences, by R. J. Harshbarger, and J. J. Reynolds, Brooks/Cole, 10th edition, ISBN 978-1-133-10623-4

4. **Second offering of a temporary course (if applicable): Not Applicable**

4.1 Reason for offering this course a second time on a temporary basis:

4.2 Term course was first offered:

4.3 Enrollment in first offering:

5. **Term for implementation:** Fall 2013

6. **Dates of review/approvals:**

Mathematics Department:

Feb. 15, 2013 BK

OCSC Curriculum Committee

OCSC Dean

 cls 2/22/13

UCC Chair

Provost:

Attachment: Course Inventory Form

Office of the Registrar

COURSE INVENTORY FORM

Check One [] Create New Course [X] Temporary Course Offering

1. Has this course previously been offered on a temporary basis? [] Yes [X] No If yes, indicate the term offered []

2. Subject Area [MATH] Course Number [123] Course Title (as it should appear on the transcript; maximum of 30 letters & spaces) [MATHEMATICAL APPS FOR BUSINESS]

3. Term for Implementation (e.g., Spring 2012=201210, Fall 2012=201230) [201330]

4. Official Course Title [MATHEMATICAL APPLICATIONS FOR BUSINESS]

5. Offering Unit (See Table of Code Values.) College [SC] Department [MATH]

6. Credit Hours Fixed Credit Hours: [3.00] Variable Credit Hours [] [] []

7. Repeat Limit (See instructions.) [0] Total Maximum Hours (See instructions.) [3.00]

8. Grading (Check all that apply.) [X] Standard Letter Grading [] Pass/Fail Only [] No Grade [] In Progress - IP (Course is intended to span more than one term.)

9. Schedule Type (See Table of Schedule Types.) [L] [] []

10. Corequisites (courses required to be taken concurrently with this course) Subject Area Course Number Subject Area Course Number Subject Area Course Number

11. Equivalent Courses (Include South Campus [C suffix] courses and other equivalent courses.) Subject Area Course Number Subject Area Course Number Subject Area Course Number

12. Prerequisites (See instructions.) Subject Area Course Number Subject Area Course Number Subject Area Course Number

[] Other [Math ACT score of 22 or better or Math SAT score of 510 or better or a score of 14 or better on the WKU Math Placement Exam or a score of 14 or better on the KYOTE or a score of 50 or better on the COMPASS (College Algebra domain).]

13. Course Attribute [] Honors Course [] Developmental Course

14. Course Restrictions [] Include/[] Exclude College [] College [] Major [] Major [] Classification []

15. Course Description (Indicate exactly as it should appear in the University Catalog. Include pertinent special information, e.g., course fees, pass/fail grading, field trips, transportation requirements, etc.) Graphing and problem solving are integrated throughout the study of algebraic concepts including polynomial, rational, exponential and logarithmic functions. Topics also include mathematics of finance, introduction to probability, and derivatives, with emphasis on applications in business-related fields. Not accepted for credit toward a mathematics major or minor.

16. Approvals for Temporary Course Only: Department Head [Signature] Date [2/22/13] College Dean [Signature] Date [2/22/13] Graduate Dean [] Date [] Provost Office [] Date []