New Course Request

Indiana University

Check Appropriate Boxes: Undergraduate credit [x]  Graduate credit [ ]  Professional credit [ ]

1. School/Division  Science / Mathematical Sciences  2. Academic Subject Code  MATH

3. Course Number  166  (must be cleared with University Enrollment Services)  4. Instructor

5. Course Title  Calculus and Analytic Geometry II

Recommended Abbreviation (Optional)  

(Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year):  Spring 2009

7. Credit Hours: Fixed at  4  or Variable from  to

8. Is this course to be graded S-F (only)? Yes  [x]  No  [ ]

9. Is variable title approval being requested? Yes  [ ]  No  [x]


11. Lecture Contact Hours: Fixed at  4  or Variable from  to

12. Non-Lecture Contact Hours: Fixed at  0  or Variable from  to

13. Estimated enrollment:  150  Fall  190  Spring  of which  0  percent are expected to be graduate students.

14. Frequency of scheduling: Every Sem  Will this course be required for majors? Yes

15. Justification for new course: New course replaces MATH 164; change in credit hours from 5 to 4.

16. Are the necessary reading materials currently available in the appropriate library? Yes

17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.

18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a copy of the appropriate form.

Submitted by:

[Signature]

Department Chairman/Division Director

Date  3/2/08

Approved by:

[Signature]

Dean

Date  3/2/08

Dean of Graduate School (when required)

Date

Chancellor/Vice-President

Date

University Enrollment Services

Date

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UPS 724

University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White
MATH 166
Calculus & Analytical Geometry II


Syllabus

Listed are the sections of the text that must be covered. Other sections can be covered at the instructors discretion. There should be ample time to cover some other sections.

7. Inverse Functions: Exponential, Logarithmic, and Inverse Trigonometric Functions
   
   (a) All of chapter 7 must be covered except for the part of section 7.7 dealing with inverse hyperbolic trig functions.
   
   (b) The instructor decides whether to use sections 7.2, 7.3 and 7.4 or 7.2*, 7.3* and 7.4*.

8. Techniques of Integration
   
   (a) Reviewing u-substitution (Section 5.5) and referring the student to Appendix D for a review of Trigonometry, are optional but advisable preparation for this chapter.
   
   (b) All of chapter 8 with the exception of 8.6 must be covered.

9. Further Applications of Integration
   
   (a) Sections 9.1 to 9.3 must be covered.
   
   (b) Sections 9.4 and 9.5 are optional.

11. Parametric Equations and Polar Coordinates
   
   (a) Sections 11.1 to 11.4 must be covered.

12. Infinite Sequences and Series
   
   (a) Sections 12.1 to 12.10 must be covered.
   
   (b) Section 12.11 should be discussed, but discussion and analysis of the remainder term is optional.
**Purdue University**

Request for Addition, Expiration, or Revision of an Undergraduate Course (100-400 Level)

**Department:** Mathematical Sciences

**Effective Session:** Fall 2006

**Instructions:** Please check the items below which describe the purpose of this request.

- [x] New course with supporting documents
- [ ] Add existing course offered at another campus
- [ ] Expiration of a course
- [ ] Change in course number
- [ ] Change in course title
- [ ] Change in course credit type
- [ ] Change in course attributes (department head signature only)
- [ ] Change in institutional hours
- [ ] Change in course description
- [ ] Change in course requisites
- [ ] Change in semesters offered (department head signature only)
- [ ] Transfer from one department to another

**Proposed:**

- Subject Abbreviation: MATH
- Course Number: 108
- Long Title: Calculus and Analytic Geometry II

**Existing:**

- Subject Abbreviation: MATH
- Course Number: 106

**Terms Offered:**

- [x] Summer
- [x] Fall
- [x] Spring

**Campus(es) Involved:**

- [ ] Calumet
- [ ] Cont Ed
- [ ] Ft. Wayne
- [x] Indianapolis
- [ ] N. Central
- [ ] Tech Statewide
- [x] W. Lafayette

**Credit Type:**

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**Course Description (Include Requisites):**


**Calumet Department Head**

- Date

**Calumet School Dean**

- Date

**Fort Wayne Department Head**

- Date

**Fort Wayne School Dean**

- Date

**Indianapolis Department Head**

- Date

**Indianapolis School Dean**

- Date

**North Central Department Head**

- Date

**North Central Chancellor**

- Date

**West Lafayette Department Head**

- Date

**West Lafayette College/School Dean**

- Date

**West Lafayette Registrar**

- Date

**Office of the Registrar**