MISCELLANEOUS CHANGE PROPOSAL

Please use this form to make minor changes to a program. Examples of such changes include the following:

- Changing the total number of credits for a degree
- Changing course pre-requisites, unit values, etc.
- Changes in the University General Education or designation of specific courses to satisfy General Education requirements
- Changing policies and procedures regarding Undergraduate Admissions criteria
- Policies on probation and disqualification with the various undergraduate programs
- Changes in programs, majors, concentrations, minors, and tracks, unless these are "major" changes (see below), in which case you should use a "Changes to Existing Programs" form

Note: a major revision is one involving the smaller of: a) more than 1/3 of the courses required for the program or b) 4 or more total courses, or re-conceptualizing the purpose of the course.

Before you proceed, please review the approval process in advance and leave time for each involved person or committee to review the proposal.

DATE: 11/27/06
DEPARTMENT/SCHOOL: Mathematics/College of the Pacific
CONTACT PERSON: Sarah Merz
PHONE: 6-3040
BLDG & ROOM NO: Classroom Building, Room 103D

1. School: College of the Pacific
   Program: Mathematics
   Degree: BS/BA

2. What is being changed and what is the rationale for the change?

   The pre-requisite for MATH 166 (Mathematical Concepts for Secondary Education): Delete ESPY 121 as a pre-requisite. ESPY 121 no longer exists.

   Also, a minor revision of the course description is needed to be aligned with actual course content.

3. Existing policy (if applicable):
   Prerequisites: MATH 53 and ESPY-121.

4. New policy (if applicable):
   Prerequisites: MATH 53.

5. Catalog copy (if applicable): Secondary school mathematics from an advanced viewpoint and pedagogical perspective. Content is aligned with the mathematics subject matter requirements from the California Commission on Teacher Credentialing.
Please remember to make the corresponding changes to your program's catalog copy when you receive page proofs for next year's catalog.

MISCELLANEOUS CHANGE PROPOSAL
APPROVAL SHEET

DATE: 11/27/06
DEPARTMENT/SCHOOL: Mathematics/College of the Pacific
CONTACT PERSON: Sarah Merz
PHONE: 6-3040
BLDG & ROOM NO: Classroom Building, Room 103D

Please obtain signatures in the order they appear below, as applicable.

1. ☐ DEPARTMENT CHAIR: 
   
   DATE: 11/28/06

2. ☐ CHAIRS OF OTHER INVOLVED DEPARTMENTS (if applicable):
   (Signatures needed for new courses and deletions)
   
   DATE: 

3. ☐ CHAIR, SCHOOL/COLLEGE CURRICULUM COMMITTEE:
   
   DATE: 10/20/06

4. ☐ DEAN OF SCHOOL/COLLEGE:
   
   DATE: 10/20/06

5. ☐ GENERAL EDUCATION COMMITTEE (if applicable):
   (Signature needed for new courses and deletions)
   
   DATE: 

6. ☐ GRADUATE STUDIES COMMITTEE (if applicable):
   
   DATE: 

7. ☐ REGISTRAR:
   
   DATE: 1-17-07

☐ ACADEMIC AFFAIRS COMMITTEE:

DATE: 

Miscellaneous Change form, Page 2 of 2
Rev. 10/06
Hi Tricia,

Regarding the Miscellaneous Change Proposal for Math 166, please disregard the change in prereq. We do want to change the catalog description to the text given on the form.

Thanks, Sarah

Begin forwarded message:

> From: "Dennis Parker" <dparker@pacific.edu>
> Date: January 7, 2007 4:35:11 PM PST
> To: "Sarah Merz" <smerz@pacific.edu>, "Sarah Davis" <sdavis1@pacific.edu>
> Cc: "Larry Langley" <llangley@pacific.edu>
> Subject: Re: Need a syllabus
> 
> Sarah Davis and Sarah Merz,
> 
> I've attached a copy of the Math 166 syllabus. If the correction of the ESPY 121 prerequisite deletion does not need to be made, please recall that the petition also included a change in the course description. I would like for that change to go forward.
> 
> Thanks,
> 
> Dennis Parker
> Math 166 instructor
> 
> >>>> Sarah Merz <smerz@pacific.edu> 01/05/07 3:19 PM >>>
> Hi Sarah,
> 
> I was under the impression that we had decided not to go forward with this correction since ESPY 121 is not listed as a prereq for Math 166 in the current (2006-2007) catalog.
> 
> -Sarah
> 
> On Jan 2, 2007, at 3:39 PM, Sarah Davis wrote:
> 
> Hi Sarah & Larry,
> 
> Tricia Isbill from the Registrar's Office said that Cecilia cannot sign the Miscellaneous Change Proposal for the deletion of ESPY 121 from the pre-requisites of MATH 166 without the syllabus for Math 166. Please prepare this as soon as possible and I will deliver it to the Registrar's Office. Feel free to send the syllabus electronically to me to speed up the process. Besides this one document, everything seems to be moving along smoothly.
TOPIC 1. TEACHING MATHEMATICAL CONCEPTS AND PRINCIPLES

Nature of a Concept
Examples and Non-examples
Multiple Perspectives of Examples
Principles as a Relationship of Concepts
Measuring Concept and Principle Acquisition
Verbalization and Non-verbal Awareness

TOPIC 2. TEACHING FOR MEANING

The Issue Defined: Meaningful vs. Rote Learning
Three Avenues to Meaningful Learning
Specious Meaning
Mnemonic Devices for Memory

TOPIC 3. MOTIVATION OF LESSONS

Achievement Goals
Applications
Recreational Mathematics
The Role of the Teacher

TOPIC 4. TRANSFER OF LEARNING

The Indispensable Role of Transfer
Lateral and Vertical Transfer
Principles and Practice (Judd's Classic Experiment)
Mathematics and "Mental Discipline"

TOPIC 5. MATHEMATICAL SKILLS AND PRACTICE

The Role of Practice in Learning
Automation of Skills
Some Guidelines for Effective Practice
Types of Practice: Mass and Distributed

TOPIC 6. ACTIVE AND PASSIVE LEARNING
The Issue Defined: Student as Recipient or Participant
Discovery and Expository Teaching
Constructivist Learning and Teaching
The Role of Questioning
Adjunct Questions

TOPIC 7. THE SECONDARY MATHEMATICS CURRICULUM

History of the Mathematics Curriculum
The NCTM Principles and Standards for School Mathematics
The California Mathematics Framework
Mathematics Content Standards for California Public Schools
Current Curriculum Issues

TOPIC 8. ORGANIZING FOR INSTRUCTION

Effective Teaching Behaviors
Classroom Management
Evaluating Homework
Grading Exams
Current Assessment Issues
Group vs. Individualized Instruction
Cooperative Group Learning
The Role of Calculators and other Technologies

TOPIC 9. SELECTED TOPICS (as time permits)
COURSE ANNOUNCEMENTS


EXAMINATIONS. There will be two examinations. The first will be given at the conclusion of Topic 6. The second exam will deal with Topics 7, 8, and 9.

CONTENT ASSIGNMENTS. These assignments will cover content taught at the secondary level (for the most part, advanced level) as described in the California Content Standards from the Mathematics Framework. These will be explained further during the course.

READINGS IN MATHEMATICS EDUCATION. Several readings will be assigned, taken from professional journals and other publications. Each reading assignment will entail responding to a set of questions and/or summary of the article. Your responses will either be handed in or used to intelligently participate in seminar discussions of the articles.

PRESENTATIONS. You will present math problems with solutions and may also present a lesson as if you were introducing it to a high school or middle school class.

RESEARCH PAPER. You will select a topic and write a typed and referenced research paper.

FIELDWORK. TBD.

ATTENDANCE. Attendance (both in body and spirit) is required. That is, your grade will be directly affected by your attendance.
DETERMINATION OF COURSE GRADE (in percentages):

93 - 100 A     73 - 76 C
90 - 92 A-     70 - 72 C-
87 - 89 B+     67 - 69 D+
83 - 86 B      60 - 66 D
80 - 82 B-     0 - 59 F
77 - 79 C+

OFFICE: 101-B Classroom Building

TELEPHONE: 946-3039 (Office) and 476-2072 (Home).

OFFICE HOURS: M 8:30 – 10:30, 3:00 – 4:00 F 8:30 – 10:30. Other times by appointment or coincidental encounter. I will be in my office on some Wednesday mornings – when I am not doing grant-related activities.

COURSE PREREQUISITES: Calculus II and Fieldwork component of pre-professional education courses.

LAST DAY TO DROP: October 18.

NOTE: Copies of student work may be retained to assess how the learning objectives of the course are met.

HONOR CODE: The University Honor Code is an essential element in academic integrity. It is a violation of the Honor Code to give or receive information from another student during an examination, to use unauthorized sources during an examination, or to submit all or part of someone else's work or ideas as one’s own. If a student violates the Honor Code, the faculty member may refer the matter to the Office of Student Life. If found guilty, the student may be penalized with failure of the assignment or failure of the course. The student may also be reprimanded or suspended from the University. A complete statement of the Honor Code may be found in the Student Handbook, Tiger Lore.