

# Approval Form

1701.421

Proposal Title: Course - Mathematics Field Experience

Sponsor(s) Prof Fran Masat Dept.: Math. Ext. 6514

Check one:  Course  Specialization  Concentration  Minor  Achievement Certificate

Certification Program  Major Program  Minor Change (please name, deletion or credit/title/catalog change)

Undergraduate  Graduate 3 Credit Hours

<p><b>Step 1 (Department)</b></p> <p><input checked="" type="checkbox"/> Approved <u>10-14-92</u> Date</p> <p><input type="checkbox"/> Not Approved</p> <p><u>Marcus Wright</u> Dept. CC Chairperson</p> <p><input checked="" type="checkbox"/> Reviewed <u>10/15/92</u> Date</p> <p><u>[Signature]</u> Dept. Chairperson</p>	<p><b>Step 2 (Receipt)</b></p> <p><input checked="" type="checkbox"/> SCC# <u>422-2378</u></p> <p>Proposal Received _____ Date</p> <p><u>[Stamp: OCT 15 1992]</u></p> <p><u>[Signature]</u> SCC Chairperson</p>	<p><b>Step 3 (School CC)</b></p> <p>Reviewed <u>10-29-92</u></p> <p><input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved</p> <p><b>Comments:</b> <i>need to specify number of hours in field and give examples of placements</i></p> <p><u>[Signature]</u> School Curr. Comm. Chairperson</p>
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**Step 4 (Academic Dean)**

Recommend  
 Not Recommend  
 Conditionally Recommend (see comments)

Reviewed \_\_\_\_\_  
Date

**Comments:**  
NOV 5 1992

[Stamp: RECEIVED]

\_\_\_\_\_  
Signature, Dean of School

**Step 5 (SCC)**

Open Hearing 12/11/92  Approved by Senate Curriculum Committee 12/11/92  
Date Date

Returned to sponsor(s) for the following reasons:

**Step 6 (Senate)**

Presented to Senate 1/22/93  
Date

Approved  Not Approved

Notification to Executive Vice-President/Provost \_\_\_\_\_  
Date

[Signature]  
Signature, SCC Chairperson

**Step 7 (Executive V.P./Provost)**

Received \_\_\_\_\_

If no, reasons are as follows: \_\_\_\_\_  
Date

Approved  Yes  No

Student credit hours \_\_\_\_\_

Faculty load hours \_\_\_\_\_

Equalized credit hours \_\_\_\_\_

Official copy and approval sheet filed \_\_\_\_\_  
Date

\_\_\_\_\_  
Signature, Executive Vice-President/Provost

**Registrar**

Approved course description received 23 Feb 93  
Date

Hegis Taxonomy and Course Number assigned 1701.421

B. J. Kelso  
Signature, Registrar

23 Feb 93  
Date

**Notification forwarded:**

- Senate Curriculum Committee Chairperson
- Department Chairperson(s)
- Academic Dean(s)
- Registrar
- Sponsor(s)

# Rowan College of New Jersey

Department of Mathematics

## Course Proposal

### Mathematics Field Experience

#### I. Details

- a) Course Title: Mathematics Field Experience
- b) Sponsor: Fran Masat, Department of Mathematics
- c) Credit Hours: 3 s.h.
- d) Course Level: Upper division, undergraduate.
- e) Curricular Effect: Restricted elective in the major.
- f) Prerequisites: A mathematical background, including Calculus III (1701.131) and Intro. to Probability and Statistics I (1702.360), and permission of the instructor.
- g) Implementation: Fall 1993.
- h) Resources: No new staff or equipment is needed. Per school policy, compensation is expected to be .5 sh credit per student (to a max of 3 sh). Library holdings are adequate. Site contacts have assured us of access to necessary facilities.

#### II. Rationale:

Although many departments at Rowan State College have field experience courses (e.g. Computer Science, Geography, Psychology), the Mathematics Department has no such course at this time. With the closing of the Cooperative Education Office, our students now need another way to acquire credit for experience. Also, because of the practical nature of mathematics, this area lends itself to a field experience approach. This broadening of the Mathematics Department academic offerings would enhance the opportunity for students seeking an applications-oriented training.

There is evidence that student contact with industry while still in school increases motivation for the subject, adds to understanding and knowledge, gives insight and training in dealing with people and looking for employment, and perhaps most importantly, increases

the student's chances of finding a job. For these reasons, many departments at Rowan have field experience courses. An additional benefit to the College, which should not be overlooked, is the interaction of the faculty with the surrounding industries.

### III. Essence of the Course

#### a) Objectives in relation to student outcome

Students will conduct work at off-campus positions in industry, agencies and institutions, utilizing applied mathematics and statistics. For example, students may work as an engineering assistant at L&S Engineering Associates in Haddonfield, or on an actuary-analyst-mathematician team at Prudential Life Insurance Co. in Philadelphia, or as a research assistant at the National Federal Aviation Administration Technical Center in Pomona, or as a programmer-analyst for National Data Processing in Hammonton.

Normally, students will be expected to work at least 150 hours during the semester in which they receive their credit. They will be closely supervised by their field experience instructor who also will be responsible for informing students individually of their responsibilities and objectives relative to the particular location where they will study and work.

By being immersed in a real-life environment, students will be able to integrate and appreciate much of the material learned in the classroom. In addition, students will be learning much that is not available in the classroom.

Students will be evaluated by means of bi-weekly and an end-of semester reports to the course instructor. Written input from the student's work supervisor or in-person interviews with the student's work supervisor also will be used in the evaluation.

#### b) Topical Outline

The student first chooses a site, meets with a supervisor on site, and discusses possible projects (topics) with that supervisor. Having chosen a project(s), the student then meets with his or her faculty advisor and the field experience instructor to confirm the appropriateness of the project(s).

### IV. Consultants:

Letters of comment and support have been attached from:

Dr. Don Stone, Department of Computer Science  
Dr. Dick Scott, Department of Geography and Anthropology

**Catalog Description:**

**Mathematics Field Experience:**

(Prerequisites: 1701.131, 1702.360, and permission of instructor)

Students accept assigned projects in a professional environment. These projects normally involve applied mathematics or statistics. Students are expected to work at least 150 hours during the semester for which they receive credit. Written reports are required.