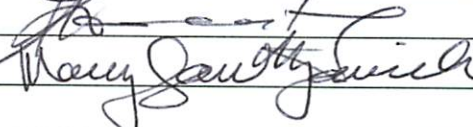


LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No.	UWUCC Action-Date:	Senate Action Date:
		09-360	App-12/8/09	App 1/26/10

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person John Zhang	Email Address zhang@iup.edu
Proposing Department/Unit Mathematics	Phone 7-2608

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

1. Course Proposals (check all that apply) ☐ New Course ☐ Course Prefix Change ☐ Course Deletion ☐ Course Revision ☐ Course Number and/or Title Change ☐ Catalog Description Change		
<u>Current</u> Course prefix, number and full title		<u>Proposed</u> course prefix, number and full title, if changing
2. Additional Course Designations: check if appropriate ☐ This course is also proposed as a Liberal Studies Course. ☐ Other: (e.g., Women's Studies, Pan-African) ☐ This course is also proposed as an Honors College Course.		
3. Program Proposals ☐ New Degree Program ☐ Program Title Change ☒ Program Revision ☐ New Minor Program ☐ New Track ☐ Other		
Minor in Applied Statistics		
<u>Current</u> program name		<u>Proposed</u> program name, if changing
4. Approvals		
Department Curriculum Committee		Date 4/21/09
Chair(s)		
Department Chair(s)		4/21/09
College Curriculum Committee Chair		10/16/09
College Dean		10/19/09
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs	Gail S Sedquist	12/08/09

* where applicable

Received

OCT 20 2009

Liberal Studies

1. Revised Program**Minor—Applied Statistics****16****Required Courses:**

9cr

MATH 214 or 216 or 217

MATH 417

MATH 418

Controlled Electives:

7cr

At least 7 credits from the following:

MATH 115 or 121 or 125, 363, 364, CRIM 306, QBUS 215, ECON 356, PSYC 291, or any statistics or quantitative methods course approved by the Applied Statistics Advisor.

2. Summary of Changes

Current Minor Program

Minor—Applied Statistics**16**

At least 16cr selected as follows:

- a) introductory calculus course: MATH 115 or 121 or 123
- b) Introductory statistics course: MATH 214 or 216 or 217
- c) MATH 417
- d) MATH 418

The remaining hours may be chosen from the following:

- a) a second calculus course: MATH 122 or 124
- b) MATH 171
- c) QBUS 215
- d) Any course for mathematics majors approved by the Applied Statistics Advisor.

Proposed Minor Program

Minor—Applied Statistics**16****Required Courses:**

9cr

MATH 214 or 216 or 217

MATH 417

MATH 418

Controlled Electives:

7cr

At least 7 credits from the following:

MATH 115 or 121 or 125, 363, 364, CRIM 306, QBUS 215, ECON 356, PSYC 291, or any statistics or quantitative methods course approved by the Applied Statistics Advisor.

1. We are moving the calculus course from the required courses to the controlled electives.
2. We are removing a second calculus course and MATH 171 Introduction to Linear Algebra from the list of choices.
3. We are listing more specific courses that are allowed in the minor.

3. *Rationale*

1. Moving introductory calculus course: MATH 115 or 121 or 123 from required to optional allows students who don't need calculus to earn a minor without turning away students who are required to take calculus. MATH 123 is being eliminated as an option because MATH 123 has been phased out of the curriculum.
2. We are removing these mathematics courses to give more emphasis to statistics in the minor.
3. The content of MATH 363 and MATH 364 (Mathematical Statistics I and II) makes them viable courses for the minor program. Formally stating courses like CRIM 306 (Criminological Research Methods), ECON 356 (Introduction to Econometrics), and PSYC 291 (Research Design and Analysis II), all of which are routinely approved by the Applied Statistics Advisor, will alert students who are taking those courses that they can use them for the Applied Statistics minor.

III. Implementation

1. This change will take effect with the 2010 incoming freshman class. We will accept MATH 123 as a substitution for MATH 125 in the minor for students who have already taken that calculus course.
2. Faculty resources are adequate.
3. Other resources are adequate.
4. We do not expect these revisions to change the number of students in the program.

IV. Periodic Assessment

1. The Mathematics Department will evaluate this program as part of its usual program assessment. We will also be monitoring student perceptions and attitudes about mathematics. All this will be accomplished with the usual course grades and current surveys.

V. Course Proposals

None.

VI. Letters of Support or Acknowledgement

----- Original Message -----

From: Lon Ferguson
To: John Zhang
Sent: Monday, February 16, 2009 3:10 PM
Subject: Re: Support letter for Applied Statistics Minor revision

Hi John:

The Safety Sciences Department supports this revision.

----- Original Message -----

From: Mary Ann Rafoth
To: John Zhang
Sent: Monday, February 16, 2009 10:27 AM
Subject: Re: Support letter for Applied Statistics Minor revision

Dear John -- I can support this change and feel that a minor in statistics is very valuable to many students. I am not aware of any way it effects the college in particular. Mar

----- Original Message -----

From: Mary Lou Zanich
To: Zhang@iup.edu
Sent: Friday, February 13, 2009 5:37 PM
Subject: Revision of Applied Statistics Minor Program

Dr. Zhang,

Thank you for the opportunity to review the proposed revisions in your Applied Statistics minor program. As you know, we often encourage psychology majors who are contemplating graduate school to consider a minor in Applied Statistics. those students who have opted for this route have an edge up and often find themselves well ahead of their peers in preparation for the research associated with doctoral programs in psychology. The inclusion of PSYC 291: Research Design and Analysis II formalizes a long-standing pattern of using this course as one of the acceptable courses for the minor. It does seem that students will now be better able to see how an Applied Statistics minor might make sense for them.

This revision has the support of the Department. It will not affect our enrollments in PSYC 291 as this course is taken exclusively by majors and has the prerequisite of PSYC 290.

Mary Lou Zanich

----- Original Message -----

From: Willard Radell

To: John Zhang

Cc: Debbie Bacco ; DAVID YERGER

Sent: Friday, February 20, 2009 5:45 PM

Subject: Re: Support letter for minor revision in Applied Statistics Minor

Hi John,

Good to hear from you.

The Department of Economics Curriculum Committee has examined the stated revision in the Applied Statistics Minor in the Department of Mathematics and recommends support.

You have the support of the Department of Economics for the stated revision in the Applied Statistics Minor in the Department of Mathematics.

Will

(Willard W. Radell)
Interim Chairperson
Department of Economics

----- Original Message -----

Note: An email to require a letter of support was sent to Dean Camp of business school (see attached bellow). We have not received any reply yet. We are proceeding with the application for program revision.

----- Original Message -----

From: John Zhang

To: Robert.Camp@iup.edu

Cc: John Zhang ; Gary Stoudt

Sent: Thursday, February 12, 2009 12:16 PM

Subject: Support letter for Applied Statistics Minor revision

Dean Camp,

Long time no see. I hope this email finds you well!

I am writing to seek your support to our applied statistics minor revision. I have attached copies of the applied statistics minor revision proposal with this email. The motivation for the revision is twofold: make it easier for students to obtain a statistics minor and make the program be consistent with the math department's current curriculum. The major changes are:

1. Move the calculus requirement from required to controlled elective;
2. Remove MATH123 from the list because the math department has phased out the course.
3. Change the listed credit hours to represent the corresponding course credit hour changes as a result of our department's curriculum revision (e.g. the credit hour for MATH216 is changed to 3 from 4).

We think these changes are necessary. Your support will be highly appreciated.

John Zhang
Professor of Mathematics
Stright Hall, Room 233
210 South Tenth Street
Indiana, PA 15705

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