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Kim-

07207
Revised

Minnesota State University, Mankato HOLD and CLEAR buttons only compatible with Acrobat V. 4 and 5

Curriculum Proposal

Please type or select the requested information. Print completed forms, add appropriate paper attachments, and route through MSU's curricular process for recommendations and decisions.

		(Check all that apply):		Proposal #	266
College:	Science, Engineering and Technology	<input checked="" type="checkbox"/>	Undergraduate	Effective Date of Change:	
Department:	Mathematics and Statistics	<input type="checkbox"/>	Graduate	Academic Year	06-07
Program:	Statistics	CIP # 27.0101		(For Office Use Only)	
Type of Change	COURSE PROPOSALS		Course Designator	Number of	
Proposed:	New Course		and Number	Credits	
Title Current:					
Title Proposed:	Statistics Capstone Experience		Stat 492		3
24-Char. Abbrev:			(if applicable)		

★
Revised
description

Include a course or program description for the Bulletin (30-40 words maximum for courses, 100 for programs):
 Description: This course is designed to allow undergraduate students an opportunity to integrate their statistics experiences by engaging each student in working on problems in applied or theoretical statistics.
 Prerequisites: Any two of STAT 357, STAT 358, STAT 359, and STAT 450 and senior standing. S

Rationale or Justification for change:
 The department's last 5-year program review indicated a need for a capstone course for majors in the department. Stat 492 provides a capstone course for the proposed broad statistics major. The Stat 492 course would be specific to the broad statistics major.

*****For General Education or Cultural Diversity Courses Only*****

General Education Course:		Cultural Diversity Course:	
GE Category #	GE Category Name (Maximum of 3 Categories)	(Please check one.)	
N/A		<input type="checkbox"/>	Core (At least 75% devoted to topics of race, gender, sexual orientation, age, class, and disabilities as they occur in United States Society.)
N/A		<input type="checkbox"/>	Related (At least 25% devoted to the above topics or to a global perspective on topics related to African American, Asian, Hispanic, and Native American inhabitants of the United States.)
N/A			

For Writing Intensive Courses, attach a description of the kind and quantity of writing.
 For Upper Division Courses, include a description of the respects in which it is broad and general rather than narrow and specific, and so suitable as GE.

Attach paper copies of the following:

- Syllabus or course outline.
- Course's student learning outcomes associated with each GE competency or CD designation.
- List of strategies to be used to assess students' achievement of each GE competency or CD designation.

*****For New Courses*****

(Check all that apply):		Instructional Type:	Lecture	Course will be offered:	
<input type="checkbox"/>	Course is an elective.	Grading Format:	<input checked="" type="checkbox"/> Grade <input type="checkbox"/> P/N	<input type="checkbox"/>	Fall Semester
<input checked="" type="checkbox"/>	Course is required for program		See statistics major proposal.	<input checked="" type="checkbox"/>	Spring Semester
<input checked="" type="checkbox"/>	Pre- or Co-requisites:		STAT 357, 358, 359, 450 (at least two of these)	<input type="checkbox"/>	Summer Session
<input type="checkbox"/>	Other courses are being changed or eliminated. (Explain.)				

Course content or title is similar to courses in other departments. (Attach copy of letter of agreement with other program(s) contacted. Indicate the nature of the discussions and/or resolution of differences or potential conflicts.)

Attach paper copies of the following:

- Syllabus or course outline.
- Course's student learning outcomes.
- A list of resources required to offer and support this course.
- A description of how teaching this course will affect department staffing.
- If 400/500 level course, an explanation of added expectations of graduate students.



**Minnesota State University, Mankato
Curriculum Proposal**

Signature Page

Department

Recommended (Category/ies _____)

Not Recommended (Category/ies _____)

Garrison Pearson 10/18/06
Department Chair Date

Comments: See attached minutes of department meeting.

College Curriculum Committee

Recommended (Category/ies _____)

Not Recommended (Category/ies _____)

Karen C. Olson
Committee Chair Date

Comments:

College Dean

Recommended (Category/ies _____)

Not Recommended (Category/ies _____)

[Signature] 11/4/06
Dean Date

Comments:

General Education Subcommittee

Recommended (Category/ies _____)

Not Recommended (Category/ies _____)

General Education Subcommittee Chair Date

Comments:

Undergraduate Curriculum and Academic Policy Committee

Recommended (Category/ies _____)

Not Recommended (Category/ies _____)

[Signature] 3/20/07
UCAP Faculty Chair Date

Comments:

Faculty Association Graduate Committee

Recommended

Not Recommended

Faculty Association Graduate Chair Date

Comments:

Graduate Dean

Recommended

Not Recommended

Graduate Dean Date

Comments:

Academic Affairs Council

Recommended (Category/ies _____)

Not Recommended (Category/ies _____)

[Signature] 3/28/07
Assistant Vice President Date

Comments:

Sr. Vice President and Vice President for Academic Affairs

Approved (Category/ies _____)

Not Approved (Category/ies _____)

[Signature] 3/28/07
Sr. Vice President / Vice Pres. Academic Affairs Date

Comments:

Syllabus with Learning Outcomes

Course Title Stat 492 Statistics Capstone Experience (3 Semester Hours)

Description: This course is designed to allow undergraduate students an opportunity to integrate their statistics experiences by engaging each student in working on problems in applied or theoretical statistics.

Prerequisites: Any two of STAT 357, STAT 358, STAT 359, and STAT 450 and senior standing. S

Goals

1. To engage students in the solution of an applied or theoretical problem in statistics that enables each student to integrate the knowledge gained in their undergraduate statistical experience.
2. To communicate statistics in both written and oral form.

Objectives

1. Students enrolled in the course, in conjunction with the course instructor(s), will select an appropriate problem for a research topic.
2. Students will learn to make statistical objectives, develop appropriate analytical strategies, select appropriate method(s) of analysis, and construct valid statistical arguments in presenting the findings.
3. Students will make professional oral and written presentations of their findings for their proposed study. Presentations should include the background of the problem and the key aspects why certain steps are conducted.
4. Students will engage in a group project activity unless the instructor requires individual(s) work separately.
5. Students will use appropriate statistical language to communicate their results.
6. Students will demonstrate an understanding of written statistical concepts at an appropriate level.

Evaluation

Class participation:	20%
Objective of study:	10%
Data Collection:	20%
Analysis:	20%
Writing:	20%
Presentation:	10%

Class Activities (class meets 3 times per week, 50 minutes per meeting)

Week 1: Introduction and Objective of study

Week 2: Literature search

Week 3 and Week 4: Select the Project(s) and discuss Sampling Methods

Week 5 - Week 7: Data Collection and Tackling related issues

Week 8 - Week 10: Data Analysis methods and application

Week 11 - Week 13: Formal writing

Week 14 and Week 15: Presentation of the paper(s)

Mathematics and Statistics Department
Meeting Minutes
October 16, 2006

Present: Boyd, Guy, Haskins, Hermann, Kapplinger, Kim, B. Lee, N. Lee, Martensen, Pearson, Rahman, Regas, Sanjel, Singer, Waters, Wiest, Zuiker.

Minutes of the September 15, 2006 meeting were approved by consensus.

Mark Zuiker presented the proposal for the Broad Major in Statistics. (See attached)

Zuiker moved that Stat 492 Capstone Experience be approved and sent to the college curriculum committee. It was seconded by Wiest, a vote was taken and it was approved.

Zuiker moved that the Broad Statistics Major be accepted and sent to the college curriculum committee. Waters seconded the motion.
Motion passed.

Bill Lee moved and that the prerequisites for Stat 154 and Math 130 be changed to

Must achieve a score of 18 or better on the MNSCU Math readiness Test, or have achieved an ACT Math subscore of 19 or higher, or successful completion of Math 098

Boyd seconded the motion.
Motion passed.

Boyd moved that the catalog description on Math 181 delete the words "to the fields of business and economics" Namyong Lee seconded the motion. A vote was taken and the motion passed.

The curriculum committee was given the charge to review all prerequisites in the catalog. The committee was also charged with developing a calculus course that will meet the needs of students seeking middle school licensure.

Zuiker moved that the department support CS option to take Math 181 for their new major. Wiest seconded the motion. A vote was taken and the motion passed.

Rahman presented a proposal for two MAX Scholar Seminars. (See attached)
Namyong Lee moved that the MAX Courses be accepted.
Zuiker seconded the motion.
Motion passed.

Zuiker reported on the status of Chaska High School students' concurrent enrollment in Math 112. After the first year requirements to enroll in the course will be the same as on campus, There will be 3 sight visits, tests will be monitored for content and students will take the same final as students on campus.

Rahman reminded the faculty that the department does not have a representative to the search committee for the new dean and asked for volunteers.

List of resources required to offer and support this course: This course can be taught by current department faculty. No additional resources/materials are needed.

Description of how teaching this course will affect department staffing: This course will require 3 credits of faculty load per year.

This course will not be offered at the 500-level.

College of Science, Engineering and Technology
Curriculum Committee Meeting Minutes
WA 303, Tuesday, October 31, 2006

Present: Harry Petersen (AMET), Beth Lavoie (Biology), Jim Rife (Chemistry/Geology), Gregg Asher (CIS), Julio Mandojana (ECET), Brian Wasserman (IDCM), Dan Singer (Math/Statistics), Karen Chou (ME/CivE), Youwen Xu (Physics/Astronomy), Mahbubur Syed (UCAP Representative for CSET).

Guests: David Haglin (CIS), Bill Hudson (ECET)

1. The meeting was called to order at 8:06 AM.
2. The minutes of 10-24-2006 meeting was approved as written.
3. Karen Chou thanked Jim Rife and Gregg Asher for chairing the 10-24-06 meeting.
4. David Haglin and Bill Hudson attended in order to clarify any confusion in the proposal CIS and ECET submitted. Bill Hudson also brought some of the previously required documentation to the committee for reviewing.
5. The committee reviewed 165 proposals. 164 proposals were approved contingent upon the required materials submitted in proper format. Please see attached spreadsheet for details. Proposal 07168 was tabled for insufficient of information.
3. Jim Rife left at 9 AM, and Beth Lavoie left at 9:20 AM, due to prior commitment.
4. Several members of the committee suggested UCAP to allow "Class action" for simple proposals such as change of designators or change of prerequisites. It would save the related parties a lot of work.
5. Two proposals were delivered to us yesterday (10-30-06) afternoon at 4 PM. Many committee members did not have a chance to review the proposal. They are general education proposals. We may vote on these proposals using email if possible.

Meeting adjourned at 9:50 am.

Respectfully submitted,

Youwen Xu, Secretary

Curriculum Committee		10/31/2006					
Proposal Review Summary		Present				Guest:	
Beth Lavoie (Biology)	yes			ECET	Bill Hudson		
Brian Wasserman (IDCM)	yes			CIS	David Haglin		
Dan Singer (Math/Statistics)	yes		UCAP Rep	CIS	Mahbubur Syed		
Gregg Asher (CIS)	yes						
Harry Petersen (AMET)	yes						
Julio Mandojana (ECET)	yes						
Jim Rife (Chemistry & Geology)	yes						
Karen Chou (ME/CIVE)	yes						
Youwen Xu (Physics/Astronomy)	yes						
Dept.	Type	Description	M	S	Appr	Comments/need	
CIS	Change in Requirements-Courses Added	Program Redesign					
CIS	Change in Requirements-courses deleted	see list				withdrew	
CS	Redesign: Bulletin Copy Changes	List of deleted courses				withdrew	
CS	Redesign: Changes in Courses	Computer Science	YX	GA	Yes	Combine with 0776	
CIS	Program redesign-name change	Computer Science	YX	GA	Yes		
Chem/Geo	Change in Req- Courses(s) added	From manage. Of inform sys. To Inform. Sys. Chemistry BA	YX	GA	Yes		
Chem/Geo	Change in Req- Courses(s) added	Chemistry Minor	GA	JM	Yes		
CS	Redesign-Change in Bulletin	Computer Science	GA	JM	Yes		
Math/Stats	Redesign-Add/Delete Program Or	Statistics	YX	GA	Yes	Combine with 0776	
Math/Stats	Prog. Redesign-added courses		GA	JM	Yes	Excess information is provided	
Biology	Change in Req.-Course(s) Added		GA	JM	Yes	Need outcome assessment plan	
Biology	Change in Req.- Course(s) Added		JM	HP	Yes	Side by side prog. Comparison	
Biology	Change in Req.- Course(s) Added		JM	HP	Yes	Side by side prog. Comparison	
Biology	Change in Req.- Course(s) added		JM	HP	Yes	Side by side prog. Comparison	
Biology	Change in Req.- Course(s) Added		JM	HP	Yes	Side by side prog. Comparison	
CIS	Change in designator	COMS 202 to ISYS202	JM	GA	Yes	202W?	