

WINONA STATE UNIVERSITY
NOTIFICATIONS

Department Mathematics and Statistics

Date 1/24/2014

If the proposed curricular change involves existing courses and is considered a Notification, complete and submit this form. Refer to Regulation 3-4, *Policy for Changing the Curriculum*, for complete information on submitting proposals for curricular changes.

Please check type of change(s):

☐ Reduction in course number ☐ Change in grading option ☐ Change in hours or credits in an independent study course
☒ Change in course title ☒ Change in course description* ☐ Change in existing major, minor, option, concentration, etc.*
☐ Change in prerequisites ☐ Change in course number within level, e.g. 310 to 350 ☐ Change in delivery method

A. Current Course Information

MATH112 Modeling with Functions 3
Course No. Course Title Credits

This proposal is for a(n) ☒ Undergraduate Course ☐ Graduate Course

Applies to ☐ Major ☐ Minor
 ☐ Required ☐ Required
 ☐ Elective ☐ Elective

Prerequisites MATH 050 - Intermediate Algebra or mathematics placement.

Grading ☐ Grade only ☐ P/NC only ☒ Grade and P/NC Option

Frequency of offering Every semester

Proposed Course Information. (Please indicate only proposed changes below.)

Applied Precalculus
Course No. Course Title Credits

Prerequisites _____

Grading ☐ Grade only ☐ P/NC only ☐ Grade and P/NC Option

Frequency of offering _____

Effective date (normally the next semester) Fall 2014

B. *If the proposal requests a change in the course description, please attach a description of the change requested and list both the current and proposed course description. If the proposal requests a change in an existing major, minor, option, concentration, etc., please attach a description of the change(s) requested and list both the current and proposed program listings.

Approved by the Department

[Signature]
Department Chair

3/14/14
Date

bdegpa@winona.edu
e-mail address

Notification to the College Dean

☒ Yes ☐ No

Charla Smith
Dean of College

3/17/14
Date

Presented at A2C2 meeting on

4/9/14
Date

[Signature]
Chair of A2C2

Presented at Graduate Council meeting on (if applicable)

Date

Chair of Graduate Council

Submitted to Registrar on

4/10/14
Date

Registrar: Please notify department chair via e-mail that Notification has been recorded.

*If a dean has comments on a notification, the dean shall forward the comments to the department. [Revised 7-13-11]

5/3/2014

Current Catalog Description	Proposed Catalog Description
<p>MATH 112 - Modeling with Functions (3 S.H.)</p> <p>This course will help students learn both algebraic skills and problem-solving skills. Topics include the algebraic and symbolic manipulation of linear functions, quadratic functions, exponential and logarithmic functions, trigonometric functions, polynomial and rational functions, inverses and compositions of functions, transformations of functions and their graphs, and applications.</p> <p>In addition, the course emphasizes problem-solving skills including unit analysis; changing representations (graphical, tabular, formulaic, and verbal) of data; comparison of solutions with intuition; and analysis of various solution methods. Meets GOAL 4. Prerequisite: MATH 050 - Intermediate Algebra or mathematics placement.</p>	<p>MATH 112 – Modeling with Functions Applied Precalculus (3 S.H.)</p> <p>This course will help students learn both algebraic skills and problem-solving skills. Topics include the algebraic and symbolic manipulation of linear functions, quadratic functions, exponential and logarithmic functions, trigonometric functions, polynomial and rational functions, inverses and compositions of functions, transformations of functions and their graphs, and applications to cost, revenue, profit, supply, demand, compounded interest, future value and present value.</p> <p>In addition, the course emphasizes problem-solving skills including unit analysis; changing representations (graphical, tabular, formulaic, and verbal) of data; comparison of solutions with intuition; and analysis of various solution methods. Meets GOAL 4. Prerequisite: MATH 050 - Intermediate Algebra or mathematics placement.</p>

Winona State University - Department of Mathematics & Statistics
Minutes of the Department Meeting on 1/24/14

Present: Joyati Debnath, Brant Deppa (chair), Jeff Draskoci-Johnson, Eric Errthum, Tisha Hooks, April Kerby, Steve Leonhardi, Chris Malone, Mike Markegard, Barry Peratt, Sam Schmidt, Samuel Tsegai, Aaron Wangberg, Nicole Williams, Lee Windsperger

Announcements:

1. April Kerby's materials for tenure and promotion are available for your review. Comments and votes & comments should be turned into Kim by next Friday, January 31st.

New Business

Note: All of the items below were considered after the department waived the 40-hour rule without objection.

Motions from the Statistics Subgroup

1. STAT 100 – new course proposal and GEP proposal

The new STAT 100 course proposal and GEP proposal were approved without objection.

2. New program: B.S. Data Science (DSCI) major, minor, and courses

(i) The department approved two versions of the major, both without objection. The Math department indicated a preference for Version 2, but voted to accept Version 1 if Computer Science preferred that one. Chris was directed to submit whichever one Computer Science preferred. (Their discussion was still pending as of our meeting.)

(ii) The minor was approved without objection, also with the understanding that Computer Science might want to edit certain courses in the elective list.

(iii) All new courses associated with the proposed data science major were approved without objection. These include DSCI 210, DSCI 310, DSCI 395, DSCI 488, DSCI 492, and DSCI 495.

(iv) The notifications for the conversion of STAT 325 to DSCI 325 and STAT 425 to DSCI 425 were approved without objection.

3. Program revisions: B.S. Statistics (STAT) major, minor, and courses

(i) All revisions, both to the major and to the minor were approved without objection.

(ii) STAT 395 and STAT 495, i.e. the analogous courses to DSCI 395 and DSCI 495, were approved without objections.

Supporting documentation for items 1 – 3 above were sent to the department by Tisha Hooks (STAT 100) and Chris Malone (DSCI and STAT programs) via e-mail (01/22/14).

4. Notifications re: STAT

The following notifications seek Departmental approval. 1) In Spring, 2013, the department voted to make STAT 310 the prerequisite for a number of upper-division STAT courses. Either this paperwork was not submitted, or got lost. 2) The note in the course description for STAT 305 was corrected to read STAT 305 instead of Math 305. 3) A notification to edit course description slightly and to allow ECON 222 to serve as a possible prerequisite for STAT 310. 4) Include DSCI 210 as a prerequisite for STAT 370.

The department approved the submission/resubmission of all of these notifications.

5. Notifications re: MATH courses

The following notifications were submitted for departmental approval.

(i) A change in course title for MATH 112 from "Modeling with Functions" to "Applied Precalculus"

(ii) A change in the catalog description of MATH 112. (See the catalog language at the end of these minutes.)

(iii) A change in number for MATH 140 to MATH 132 AND a change in prerequisites from "MATH 112 - Modeling with Functions, MATH 115 - College Algebra, or MATH 120 - Precalculus" to "MATH 112 – Applied Precalculus, MATH 115 - College Algebra, or MATH 120 - Precalculus"

(iv) A change in the catalog description of MATH 132. (See the catalog language at the end of these minutes.)

The department approved all of these changes without objection.

6. Proposal re: MATH 117 from Steve, Barry, and Jeff

The department approved without objection the proposal to submit MATH 117 as a new course and also the proposal to submit it as a GEP course under Goal 4. Since the Math Subgroup had not had a chance to vote on the committee's work, the department waived normal procedures without objection. (The documents were handed out in the meeting.)

Secretary's note: If there is any confusion at to what, exactly, the department agreed to in Items 1-6 above, I can supply copies of the A2C2 paperwork upon request. Summaries of the proposals re: data science and statistics are attached below.

7. Adjourn