



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

0652
(Revised)

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):

College: Science, Engineering and Technology Undergraduate
 Department: Automotive and Manufacturing Engineering Graduate
 Program: _____ CIP # _____
 Type of Change: N/A PREREQUISITES CHANGE
 Proposed: N/A
 Title Current: _____
 Title Proposed: _____
 24-Char. Abbrev: _____

Proposal # 193 ✓
 Effective Date of Change: _____
 Academic Year 05-06
 (For Office Use Only)

Course Designator and Number	Number of Credits
Math 115	4
(if applicable)	

Include a course or program description for the Bulletin (30-40 words maximum for courses, 100 for programs):
 MATH 115 Precalculus Mathematics (4 credits)
 This course is designed for students preparing to take calculus who need a review of algebra and trigonometry. Topics include functions, graphs of functions, exponential and logarithmic functions, conic sections, systems of equations and inequalities, matrices, trigonometric functions, circular functions, vectors and complex numbers, induction, series and probability. Pre: Must achieve the appropriate score on the Intermediate Algebra Placement Test, Functions and Graphs Placement test, or ACT Math subscore (see Placement Table). Alternatively, must successfully complete Math 098 and receive permission from the department chair.

Rationale or Justification for change:
 See attached.

For General Education or Cultural Diversity Courses Only

GE Category #	GE Category Name (Maximum of 3 Categories)
N/A	
N/A	
N/A	

General Education Course:
 ? 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.

Cultural Diversity Course:
 (Please check one.)
 Core (At least 75% devoted to topics of race, gender, sexual orientation, age, class, and disabilities as they occur in United States Society.)
 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.)

Attach paper copies of the following:
 a. Syllabus or course outline.
 b. Course's student learning outcomes associated with each GE competency or CD designation.
 c. List of strategies to be used to assess students' achievement of each GE competency or CD designation.

For New Courses

(Check all that apply):

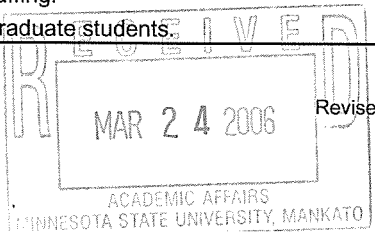
Course is an elective.
 Course is required for program
 Pre- or Co-requisites:
 Other courses are being changed or eliminated. (Explain.) _____

Instructional Type: Lecture
 Grading Format: Grade P/N

Course will be offered:
 Fall Semester
 Spring Semester
 Summer Session

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





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*****For Program Proposals*****

Attach paper copies of the following:

- a. Student learning outcomes for the program.
- b. Minutes from department and college curriculum meetings in which action was taken on this proposal.
- c. Program Assessment Plan. Forms are available on the Academic Affairs Web site:
http://www.mnsu.edu/acadaf/words/PRA_SampSLOAssessPlan.doc
- d. List of program requirements for **New** programs, or a list of **Current** and **Proposed** program requirements for **Redesigned** programs.
- e. A list of resources required to offer and support this program.
- f. A description of how offering this program will affect department staffing.
- g. A list of additional library holdings required for this program.

Please include rationale for any proposed changes in number of program credits:

*****For Programs Requiring MnSCU Approval*****

If any of the following changes are proposed, please fill out and attach MnSCU Program Approval Forms, which are available on the Academic Affairs Web site:

<http://www.mnsu.edu/acadaf/html/currformsprocesses.htm>

1. **Creation** of an entirely new program.
2. **Redesign** of existing programs, which takes any of the following forms:
 - ? Addition or deletion of a program option. Options are part of program design in which 30-50% of the courses are required as part of a common core for all students, and which offers curriculum alternatives greater than 30% of the total number of credits in the major. Options are appropriate to baccalaureate or masters programs.
 - ? Addition or deletion of a program emphasis. Emphases are part of program design in which more than 50% of the courses are required as part of a common core for all students, and which offers curriculum alternatives with a minimum of nine credits. Emphases are appropriate to associate and baccalaureate programs.
 - ? Change in program name.
 - ? Change in program CIP #.
 - ? Change in TOTAL program credits.
 - ? Change in degree award. For example, changing a B.A. to B.S.
 - ? Creation of a new degree award in a related academic area. Examples include creation of a certificate program from an existing degree program, or a new degree program from an existing degree program (e.g., Art History BA from Art BA.)
3. **Relocation** of an existing program. This is a proposal to move an existing program from one site to be exclusively offered at another site, and requires closing the program offered at the original site. For example, a program offered both on-campus and through extended campus is to be offered only at the extended campus site.
4. **Replication** of an existing program. This is a proposal to offer an existing program at a new site, which may be an existing MnSCU-approved site, or another campus of the same institution. Replicated programs are offered at both the original site and the new location.
5. **Suspension or reinstatement** of a program. This proposal suspends admission of students into an existing program, and is good for three years. Reinstatement proposals request the reopening of student admissions into a given program.
6. **Closure** of a program. This proposal requests closure of an existing program and its removal from an institution's official inventory of academic programs. Unless a department seeks to re-open a suspended program, it should be closed within three years of suspension.



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Signature Page

Department			
<input checked="" type="checkbox"/> Recommended	(Category/ies _____)	<u>Larry Pearson</u>	<u>1/19/06</u>
<input type="checkbox"/> Not Recommended	(Category/ies _____)	Department Chair	Date
Comments:			
College Curriculum Committee			
<input checked="" type="checkbox"/> Recommended	(Category/ies _____)	<u>Ally Mahoney</u>	<u>22 March '06</u>
<input type="checkbox"/> Not Recommended	(Category/ies _____)	Committee Chair	Date
Comments:			
College Dean			
<input checked="" type="checkbox"/> Recommended	(Category/ies _____)	<u>[Signature]</u>	<u>3/23/06</u>
<input type="checkbox"/> Not Recommended	(Category/ies _____)	Dean	Date
Comments:			
General Education Subcommittee			
<input type="checkbox"/> Recommended	(Category/ies _____)		
<input type="checkbox"/> Not Recommended	(Category/ies _____)	General Education Subcommittee Chair	Date
Comments:			
Undergraduate Curriculum and Academic Policy Committee			
<input checked="" type="checkbox"/> Recommended	(Category/ies _____)	<u>Mark Tomija</u>	<u>4/21/06</u>
<input type="checkbox"/> Not Recommended	(Category/ies _____)	UCAP Faculty Chair	Date
Comments:			
Faculty Association Graduate Committee			
<input type="checkbox"/> Recommended			
<input type="checkbox"/> Not Recommended		Faculty Association Graduate Chair	Date
Comments:			
Graduate Dean			
<input type="checkbox"/> Recommended			
<input type="checkbox"/> Not Recommended		Graduate Dean	Date
Comments:			
Academic Affairs Council			
<input checked="" type="checkbox"/> Recommended	(Category/ies _____)	<u>[Signature]</u>	<u>4/26/06</u>
<input type="checkbox"/> Not Recommended	(Category/ies _____)	Assistant Vice President	Date
Comments:			
Senior Vice President and Vice President for Academic Affairs			
<input checked="" type="checkbox"/> Approved	(Category/ies _____)	<u>[Signature]</u>	<u>4/26/06</u>
<input type="checkbox"/> Not Approved	(Category/ies _____)	Sr. Vice President / Vice Pres. Academic Affairs	Date
Comments:			

Proposal for changing the prerequisites for Math 115

Current wording:

Must achieve a score of 19 or better on the MnSCU Math Readiness Test, or have achieved an ACT Math subscore of 20 or higher, or successful completion of MATH 098. F, S

Proposed new wording (no deletions; additions in *italics*):

Must achieve the appropriate score on the Intermediate Algebra Placement Test, Functions and Graphs Placement Test, or ACT Math subscore (see Placement Table). Alternatively, must successfully complete Math 098 and receive permission from the department chair. F, S

Rationale:

The "with permission of the chair" is all that is new. A student should go from 098 to Math 112 instead of Math 115 unless they did very well in Math 098 (which is only P/F). The pace of 115 is such that we want to ensure that a student is sufficiently prepared to succeed. The chair serving as a gate keeper will give us a mechanism for informing the student that the pace is fast, and insuring that only those that are sufficiently prepared will go from Math 098 to Math 115. We are omitting the placement score details and refer instead to the Placement Table which will be printed in the next Bulletin.

From the minutes of the Department of Mathematics and Statistics meeting 11/18/05:

Zuiker moved and Olson seconded, "Accept the prerequisite changes for 115 with the deletion of "or successful completion of Math 098 with permission of department chair"(Must achieve a score of 19 or better on the MnSCU Math Readiness Test, or have achieved an ACT Math subscore of 20 or higher, or successful completion of MATH 098 with permission of the department chair. F, S)

Olson moved and W. Lee seconded, the amendment "Go back to original statement of new prerequisites "