



05-73

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 #	149
College:	Science, Engineering and Technology	<input checked="" type="checkbox"/> Undergraduate	Effective Date of Change:
Department:	Physics and Astronomy	<input type="checkbox"/> Graduate	Academic Year
Program:	Astronomy	CIP #	05
			(For Office Use Only)
Type of Change	COURSE PROPOSALS	Course Designator	Number of Credits
Proposed:	Change in Course—Other	AST 430	3
Title Current:	Galactic Structure		
Title Proposed:			
24-Char. Abbrev:		(if applicable)	

Include a course or program description for the Bulletin (30-40 words maximum for courses, 100 for programs):

Structure, kinematics, and dynamics of our galaxy. Pre: AST 225, PHYS 222, and MATH 223 ALT-F

Rationale or Justification for change:

Change in prerequisites: COMS 272 is being dropped from the course prerequisites because it is not being offered frequently enough (it was last taught in the spring of 1999) to provide any benefit to students in AST 430.

*****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		
<p>1 For Writing Intensive Courses, attach a description of the kind and quantity of writing.</p> <p>2 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.</p>		
<p>Attach paper copies of the following:</p> <p>a. Syllabus or course outline.</p> <p>b. Course's student learning outcomes associated with each GE competency or CD designation.</p> <p>c. List of strategies to be used to assess students' achievement of each GE competency or CD designation.</p>		

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

(Check all that apply):	Instructional Type: <input type="checkbox"/> Lecture	Course will be offered:
<input type="checkbox"/> Course is an elective.	Grading Format: <input type="checkbox"/> Grade <input type="checkbox"/> P/N	<input type="checkbox"/> Fall Semester
<input type="checkbox"/> Course is required for program		<input type="checkbox"/> Spring Semester
<input type="checkbox"/> Pre- or Co-requisites:		<input type="checkbox"/> Summer Session
<input type="checkbox"/> Other courses are being changed or eliminated. (Explain.)		
<input type="checkbox"/> 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.)		
<p>Attach paper copies of the following:</p> <p>a. Syllabus or course outline.</p> <p>b. Course's student learning outcomes.</p> <p>c. A list of resources required to offer and support this course.</p> <p>d. A description of how teaching this course will affect department staffing.</p> <p>e. If 400/500 level course, an explanation of added expectations of graduate students.</p>		



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Curriculum Proposal

Signature Page

Department			
<input checked="" type="checkbox"/> Recommended	(Category/ies _____)	<u>Mark A. Pich</u>	<u>10 Feb, 2005</u>
<input type="checkbox"/> Not Recommended	(Category/ies _____)	Department Chair	Date
Comments:			
College Curriculum Committee			
<input checked="" type="checkbox"/> Recommended	(Category/ies _____)	<u>Karen C. Chou</u>	<u>2/24/05</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>3/1/05</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 type="checkbox"/> Recommended	(Category/ies _____)	_____	_____
<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 type="checkbox"/> Recommended	(Category/ies _____)	_____	_____
<input type="checkbox"/> Not Recommended	(Category/ies _____)	Assistant Vice President	Date
Comments:			
Senior Vice President and Vice President for Academic Affairs			
<input type="checkbox"/> Approved	(Category/ies _____)	_____	_____
<input type="checkbox"/> Not Approved	(Category/ies _____)	Sr. Vice President / Vice Pres. Academic Affairs	Date
Comments:			

Memo

Department of Physics and Astronomy

Date: February 16, 2005
To: CSET Curriculum Committee
From: James Pierce, Astronomy
Re: AST 430/530

In the past, COMS 272 was included as a prerequisite for AST 430/530 to insure that students in AST 430/530 would have a working knowledge of FORTRAN and be able to use it in class assignments and projects. With the unavailability of COMS 272 and its subsequent elimination as a prerequisite, we will no longer count on our students having any background in FORTRAN, and we will not be assigning projects that utilize it.

PHYS 465 does not teach FORTRAN, and is not viewed as a substitute for COMS 272; further, it would not always be possible for students to take PHYS 465 *before* AST 430/530. Therefore, PHYS 465 will not be a prerequisite for AST 430/530. However, PHYS 465 *is* a good opportunity for our majors to gain additional experience in solving relevant problems with computers, and it is being included in the degree requirements for this reason. Elimination of the COMS 272 requirement allows us to add PHYS 465 without expanding the total credit requirement for the degree.