

**The University of Michigan
College of Engineering
Curriculum Committee**

Agenda

April 1, 2003

1:30-3:30 p.m.

GM ROOM

Fourth Floor Lurie Engineering Center

1. Approval of Minutes from March 4, 2003 Meeting
2. Change in CHEM 125/126 listing
3. CoE Bulletin 2002-03 HU/SS Requirement – Kathleen Vargo
4. Policies for Bulletin Inclusion – Jeanne Murabito
5. Course Approval Forms

**University of Michigan
College of Engineering
Curriculum Committee Meeting
Tuesday March 18, 2003
1:30-3:00 p.m.
Lurie Engineering Center GM Room
Minutes**

Armin Troesch called the meeting to order at 1:45 p.m.

Members Present: A. Troesch, J.Fessler, P. Friedmann, , G. Herrin, G.Hulbert, S.Montgomery, H. Peng, R. Robertson,, S. Takayama

Members Absent: V. Chung W. Hansen (CEE), J. Holloway (NERS), S. Pang, P. Samson (AOSS), G.Tyson (EECS)

The minutes of the last meeting were approved

EE Degree Program Change

Jeff Fessler talked about the handout which was in the Meeting Packet.

EECS is required in CS and the Department would like to make it required in EE, also. This will cost the EE Program one tech elective and one free elective bringing the total free electives to 11.

Armin Troesch asked for a motion to approve this EE Degree Program Change.

This was moved and seconded.

Motion Carried (approved)

Course Approvals

Tabled Courses: IOE 461(X-Listed with MFG 456) Modification – Adding Credit Restrictions (Not for Graduate Credit). *It was recommended to have the Department handle administratively.*

NAME 420(X-Listed with IOE 583, MFG 583 and EECS 583) Modification --
Adding CEE 420 X-Listing. *Waiting for explanation from CEE regarding
Why this is a good idea.*

Armin Troesch called for a motion to approve the following courses. This was moved and seconded.

Motion Carried (approved)

EECS 496 Modification – Changed Title; Changed Description

IOE 452 (X-Listed with MFG 455) Modification – Changed Title; Changed Description;
Changed Credit Hours.

IOE 452 (X-Listed with MFG 456) Changed Title; Changed Description; Added Credit
Restrictions; Changed Credit Hours.

IOE 552 Modification – Added X-Listing with MATH 542; Changed Prerequisites.

IOE 553 Modification – Added X-Listing with MATH 543, Changed Prerequisites.

MSE 435 Modification – Changed Description Changed Prerequisites; Changed Terms.

MSE 470 Modification – Changed Title.

ME 513 (X-Listed with AUTO 513 and MFG 513)

New Course

approved with 3 abstentions/5 in favor

ME 583 (X-Listed with IOE 583, MFG 583 and EECS 583) Modification – Removed EECS

X-listing; Changed Title Abbreviation for Time Schedule and Transcript.

TECH COMM 380

New Course

The TECH COMM 380 Program change was also approved.

Jeanne Murabito handed out ballots for the position of the new chairperson of the CoE Curriculum Committee for the Academic Year 2003-2004.

The two choices on the ballot were: Greg Hulbert, and Write in Candidate.

The vote was unanimous for Greg Hulbert.

Adjournment: Motion to adjourn was made and seconded

Motion carried (approved)

Next Meeting

Tuesday, April 1, 2003

1:30-3:30 p.m.

GM Room-LEC

**Change in
CHEM
125/126
Listing**

Wolfe, Judy

To: Rinker, Pam
Subject: RE: Chem 125-126

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

From: Rinker, Pam
Sent: Friday, March 28, 2003 11:50 AM
To: Wolfe, Judy
Cc: Judy Kulbicki (E-mail); Moody, Carole
Subject: FW: Chem 125-126

Hi Judy. I'm forwarding the email I sent to Chem this morning. If these courses are approved by the CC next Tuesday, they'll go to Exec on April 8. If they say ok, I will take them down to Judy Kulbicki around 1pm w/ a request to enter them into MPathways ASAP. That means they could be in the system by that afternoon.

We've asked Chem to keep 125 closed until the change in credits has been made. Esrold Nurse & Chuck Judge were concerned about timing, but thought that having both courses open by April 8 would give most students time to add it before early registration ends April 11.

In order to keep confusion to a minimum and ward off lots of phone calls to Chem & Advising, I also suggested the possibility of adding a **NOTE** that will show up on Wolverine Access, something like "**CHEM 125 IS TEMPORARILY CLOSED TO ENROLLMENT PENDING APPROVAL OF COURSE MODIFICATIONS. WE HOPE IT WILL BE OPEN BY 2 PM APRIL 8.**" [Carole, what do you think of this idea??]

Best, Pam

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

From: Rinker, Pam
Sent: Friday, March 28, 2003 10:12 AM
To: Moody, Carole
Cc: 'bcoppola@umich.edu'
Subject: Chem 125-126

Hi Carole. I've attached the revised course approval forms for Chem 125-126. I checked w/ Registrar's office about Brian's concerns. In terms of grading sheets for Chem 125 arriving in October, that seems to be something you'd have to request. The default is for all grade sheets to be delivered at the end of the term. If that's correct, that shouldn't be a problem. In terms of completion of both courses, I've copied below the latest email exchange w/ Evans Young. Obviously of key importance is the first statement under Chem 125. Given that Chem 126 is second in sequence, I wasn't sure if something similar needed to be included there as well. Your preference? I didn't get a clear answer from Registrar as to whether or not this can be enforced, but the hope is that it would serve as a deterrent to students bailing after Chem 125. Anything I'm forgetting? Regards, Pam

<< File: Chem 125 rv.pdf >> << File: Chem 126 rv.pdf >> << File: chem 125-126 4+4.doc >>

Hi Pam,

I think these texts will work, and are as good as we can get in terms of "enforcement"... --Evans

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

From: Rinker, Pam
Sent: Thursday, March 27, 2003 4:01 PM
To: Young, Evans
Subject: Chem 125-126

Me again. Registrar's office says that Y grade is not an option in this case since it is meant to be for a single course that continues beyond one term. Judy said she did think we could put in some language about "no credit being granted" but I'm not sure what enforcement that would carry. Prereq statements now read:

CHEM 125

No credit granted without concurrent enrollment in and completion of CHEM 126. To be elected

by students who are eligible for (or enrolled in) CHEM 130. No credit granted to those who have completed CHEM 211. I, II, IIIa.

CHEM 126

Concurrent enrollment in CHEM 125. To be elected by students who are eligible for (or enrolled in) CHEM 130. No credit granted to those who have completed CHEM 211. I, II, IIIa.

Any suggestions? Pam

Pam Rinker, Program Associate
LSA Undergraduate Education, 2552 LSA Bldg.
University of Michigan, Ann Arbor MI 48109-1382
Phone: (734) 763-7139 Fax: (734) 764-2697



COURSE APPROVAL REQUEST FORM

UNIVERSITY OF MICHIGAN

*College of Literature, Science, & the Arts
Rackham School of Graduate Studies*

To : LSA Curriculum Committee
2522 LSA Bldg 1382
or Course Approval Officer
1004 Rackham 1070

Action Requested: <input type="radio"/> Deletion of Existing Course <input checked="" type="radio"/> Modification of Existing Course <input type="radio"/> New Course	For Office Use <hr/> Received 3/27/2003 Office of the Dean College of LS&A	Date of Submission: <u>3/27/2003</u> Effective Term: <u>Fall 2003</u>
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CURRENT LISTING	REQUESTED LISTING
<input type="checkbox"/> Home Department <div style="display: flex; justify-content: space-between;"> Subject (Division) Course Number </div>	<input type="checkbox"/> Home Department (Owner) Chemistry <div style="display: flex; justify-content: space-between;"> Subject (Division) Course Number </div> Chem 125
<input type="checkbox"/> Cross-listing (if applicable)	<input type="checkbox"/> Cross-listing (if applicable)
<input checked="" type="checkbox"/> Course Title General and Inorganic Chemistry: Laboratory <i>Title Abbreviations</i> Transcript (20 char) <input type="text" value="Gen Inorganic Lab"/> Time Sched (19 char) <input type="text" value="Gen-Inorganic-Lab"/>	<input type="checkbox"/> Course Title General Chemistry Laboratory I <i>Title Abbreviations</i> Transcript (20 char) <input type="text" value="Gen Chem Lab I"/> Time Sched (19 char) <input type="text" value="Gen Chem Lab I"/>
<input type="checkbox"/> Course Description	<input type="checkbox"/> Course Description (Limit to 50 words) One four-hour laboratory and one discussion. Basic laboratory techniques and applications to simple chemical systems.
<input checked="" type="checkbox"/> Prerequisites To be elected by students who are eligible for (or enrolled in) CHEM 130. No credit granted to those who have completed CHEM 211.	<input type="checkbox"/> Prerequisites (Advisory) No credit granted without concurrent enrollment in and completion of CHEM 126. To be elected by students who are eligible for (or enrolled in) CHEM 130. No credit granted to those who have completed CHEM 211. I, II, IIIa.
<div style="display: flex; justify-content: space-between;"> <i>Distribution</i> <i>Comp/LR</i> <i>R&E/QR</i> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> HU <input type="checkbox"/> MSA <input type="checkbox"/> NS <input type="checkbox"/> CE <input type="checkbox"/> SS <input type="checkbox"/> ID </div> <div style="width: 30%;"> <input type="checkbox"/> Excl <input type="checkbox"/> Intro.Comp. <input type="checkbox"/> LR </div> <div style="width: 30%;"> <input type="checkbox"/> R&E <input type="checkbox"/> QR1 <input type="checkbox"/> QR2 </div> </div>	General Requirements <small>You MUST include a supporting statement. See Guidelines for specific requirements: http://www.lsa.umich.edu/dean/lug/index.html.</small> <div style="display: flex; justify-content: space-between;"> <i>Distribution</i> <i>Comp/LR</i> <i>R&E/QR</i> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> HU <input type="checkbox"/> MSA <input type="checkbox"/> NS <input type="checkbox"/> CE <input type="checkbox"/> SS <input type="checkbox"/> ID </div> <div style="width: 30%;"> <input type="checkbox"/> Excl <input type="checkbox"/> Intro.Comp. <input type="checkbox"/> LR </div> <div style="width: 30%;"> <input type="checkbox"/> R&E <input type="checkbox"/> QR1 <input type="checkbox"/> QR2 </div> </div>

COURSE APPROVAL REQUEST FORM

Page 2



Chem 125

3/27/2003

Modification of Existing Course

<input type="checkbox"/> Class Components (Section Types) <input type="checkbox"/> LEC <input type="checkbox"/> REC <input type="checkbox"/> SEM <input type="checkbox"/> LAB <input type="checkbox"/> DIS <input type="checkbox"/> IND <input type="checkbox"/> Other...	Class Meeting Hours per Week _____ _____ _____ _____	Graded Component (for Grade Sheet) <input type="checkbox"/> LEC <input type="checkbox"/> REC <input type="checkbox"/> SEM <input type="checkbox"/> LAB <input type="checkbox"/> DIS <input type="checkbox"/> IND	<input type="checkbox"/> Class Components (Section Types) <input checked="" type="checkbox"/> LEC <input type="checkbox"/> REC <input type="checkbox"/> SEM <input checked="" type="checkbox"/> LAB <input type="checkbox"/> DIS <input type="checkbox"/> IND <input type="checkbox"/> Other...	Class Meeting Hours per Week 1 hpw for 7 wks _____ 4 hpw for 7 wks _____ _____	Graded Component (for Grade Sheet) <input checked="" type="checkbox"/> LEC <input type="checkbox"/> REC <input type="checkbox"/> SEM <input type="checkbox"/> LAB <input type="checkbox"/> DIS <input type="checkbox"/> IND <input type="checkbox"/> Other...																																						
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cc _____ xc _____ rack _____		Date _____ _____ _____																																									

COURSE APPROVAL REQUEST FORM

Page 3



Chem 125

3/27/2003

Modification of Existing Course

Supporting Statement

As you know, UM has been under pressure to respond to its lack of a "4+4" course undergraduate chemistry program that meets the policy statements written by the majority of medical school admissions programs in the US.

I have conducted an informal telephone and e-mail survey of medical admissions Deans, and it turns out that medical admissions practices do not map onto their policies. Many of these "4+4" guidelines were written in the early 20th Century, and have not kept pace with the curricular practices of most institutions that produce the largest numbers of medical school candidates. Students with competitive records presenting non-traditional transcripts may actually constitute the majority of students admitted to US medical schools! The written policies allow the medical schools a terribly convenient "out" when declining less competitive candidates from non-"4+4" programs, permitting them to state that a student has not fulfilled the admissions requirements. As a result, nearly all UM undergraduates who applied to medical schools since we introduced our new program in 1989 have not had any problems with their admissions. At the margins, however, there have been students with non-competitive applications who have received rejections, and perhaps even fewer who have applied to schools whose practices match their policies.

That said, we respect the politically uncomfortable position that UM is currently in regarding our program. Our proposed solution is to take the current 2-credit Chem 125 (General Chemistry lab) and divide it into two half-semester courses with different titles and numbers. Student transcripts will reflect a prima facie compliance with the "4+4" policy statements of the medical schools. The course content in the new Chem 125 and 126 courses will be exactly the same as the current Chem 125 course. To the extent that we are able, we intend to require that students complete both or neither so as not to introduce too many administrative burdens to the teaching staff in this laboratory program. (See attached document titled "Meeting the '4+4' premedical admissions requirements at UM.)

Fill in only if you are adding a new discussion section to be led by a GSI. You MUST provide a statement justifying this request. Approval of the course does NOT imply approval for the required funding for GSIs. If approved, the request must then be submitted to the LSA Budget Office as usual.

GSIs

Requested FTE



COURSE APPROVAL REQUEST FORM

UNIVERSITY OF MICHIGAN

College of Literature, Science, & the Arts
Rackham School of Graduate Studies

To : LSA Curriculum Committee
2522 LSA Bldg 1382
or Course Approval Officer
1004 Rackham 1070

Action Requested: <input type="radio"/> Deletion of Existing Course <input type="radio"/> Modification of Existing Course <input checked="" type="radio"/> New Course	For Office Use <hr/> Received 3/27/2003 Office of the Dean College of LS&A	Date of Submission: <u>3/27/2003</u> Effective Term: <u>Fall 2003</u>
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CURRENT LISTING	REQUESTED LISTING
<input type="checkbox"/> Home Department Subject (Division) _____ Course Number _____	<input type="checkbox"/> Home Department (Owner) Chemistry Subject (Division) Chem Course Number 126
<input type="checkbox"/> Cross-listing (if applicable) Department _____ Subject (Div) _____ Course Number _____	<input type="checkbox"/> Cross-listing (if applicable) Department _____ Subject (Div) _____ Course Number _____
<input type="checkbox"/> Course Title Title Abbreviations _____ Transcript (20 char) _____ Time Sched (19 char) _____	<input type="checkbox"/> Course Title General Chemistry Laboratory II Title Abbreviations _____ Transcript (20 char) Gen Chem Lab II Time Sched (19 char) Gen Chem Lab II
<input type="checkbox"/> Course Description	<input type="checkbox"/> Course Description (Limit to 50 words) One four-hour laboratory and one discussion. Basic laboratory techniques and applications to simple chemical systems.
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<input type="checkbox"/>	<input type="checkbox"/> General Requirements You MUST include a supporting statement. See Guidelines for specific requirements: http://www.lsa.umich.edu/deanluglindex.html . Distribution Compl/R R&E/QR <input type="checkbox"/> HU <input type="checkbox"/> MSA <input type="checkbox"/> Excl <input type="checkbox"/> R&E <input checked="" type="checkbox"/> NS <input type="checkbox"/> CE <input type="checkbox"/> Intro.Comp. <input type="checkbox"/> QR1 <input type="checkbox"/> SS <input type="checkbox"/> ID <input type="checkbox"/> LR <input type="checkbox"/> QR2

COURSE APPROVAL REQUEST FORM

Page 2



Chem 126

New Course

3/27/2003

<input type="checkbox"/> <p><i>Class Components (Section Types)</i></p> <input type="checkbox"/> LEC <input type="checkbox"/> REC <input type="checkbox"/> SEM <input type="checkbox"/> LAB <input type="checkbox"/> DIS <input type="checkbox"/> IND <input type="checkbox"/> Other...	<p><i>Class Meeting Hours per Week</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p><i>Graded Component (for Grade Sheet)</i></p> <input type="checkbox"/> LEC <input type="checkbox"/> REC <input type="checkbox"/> SEM <input type="checkbox"/> LAB <input type="checkbox"/> DIS <input type="checkbox"/> IND	<p><i>Class Components (Section Types)</i></p> <input checked="" type="checkbox"/> LEC <input type="checkbox"/> REC <input type="checkbox"/> SEM <input checked="" type="checkbox"/> LAB <input type="checkbox"/> DIS <input type="checkbox"/> IND <input type="checkbox"/> Other...	<p><i>Class Meeting Hours per Week</i></p> <p>1 hpw for 7 wks</p> <p>_____</p> <p>4 hpw for 7 wks</p> <p>_____</p> <p>_____</p>	<p><i>Graded Component (for Grade Sheet)</i></p> <input checked="" type="checkbox"/> LEC <input type="checkbox"/> REC <input type="checkbox"/> SEM <input type="checkbox"/> LAB <input type="checkbox"/> DIS <input type="checkbox"/> IND <input type="checkbox"/> Other...																				
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<p><i>Is the course repeatable for credit?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>If yes, state maximum times it can be elected:</i></p> <p><i>If yes, state maximum total credit hours:</i></p> <p><i>If yes, can it be elected more than once in the same term?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><i>Is the course repeatable for credit?</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><i>If yes, state maximum times it can be elected:</i></p> <p><i>If yes, state maximum total credit hours:</i></p> <p><i>If yes, can it be elected more than once in the same term?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No</p>																								
<p><i>General Course Information</i></p> <p><i>Print the course in the LSA / Rackham Bulletin?</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>Print the course in the Time Schedule?</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>Print the course instructor in the Time Schedule?</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>Expected Class Size:</i> <u> 900 </u></p> <p><i>Instructor Name</i> <u> varies </u> <i>Official Title</i> _____</p>																									
<p>Approval</p> <p><input checked="" type="radio"/> Indefinitely <input type="radio"/> One Term Only</p> <p style="margin-left: 100px;"><i>Date</i> _____</p> <p>cc _____</p> <p>xc _____</p> <p>rack _____</p> <div style="text-align: right; margin-top: 20px;"> <p><i>Approval of Department Chair(s)</i> <i>Date</i></p> <p><u>William R. Roush, Chemistry Chair</u> <u>3-27-2003</u></p> <p>_____</p> <p>_____</p> </div>																									

COURSE APPROVAL REQUEST FORM
Page 3



Chem 126
 New Course

3/27/2003

<p><i>Expanded course description</i></p> <p>This laboratory course can be elected with, or following, CHEM 130. It is intended that students planning to enroll in CHEM 130 who have had little or no previous chemistry laboratory enroll concurrently in CHEM 125 and CHEM 126. The focus of this guided-inquiry laboratory is to foster critical thinking that allows students to design, perform, and interpret experiments. In addition, the student acquires technical skills that are required for further advancement in experimental sciences. Although an ability to collect and analyze data in a quantitative manner is developed, the emphasis of the course is to provide a qualitative understanding of the basic concepts of chemistry. This is accomplished by demonstrating that chemical principles are derived from experimental data. The goal is to provide students both with a more accurate picture of the scientific process and also with skills that are relevant to solving real life problems. Much of the course work is done as a member of a team. Student groups each explore the same problem with each group using different reagents and/or conditions. A networked computer system is used to collect, pool, and summarize the largely qualitative class data. Student groups address questions which require them to organize the class data using commercial graphing software. Group answers are presented in discussion.</p>	<p><i>Supporting Statement</i></p> <p>See Chem 125</p>
<p><i>Course requirements</i></p> <p>There are two 1-hour written examinations that constitute 30% of the grade. The remaining 70% of the grade is based on the points acquired through laboratory reports and discussion.</p>	<p><i>Intended audience</i></p> <p>It is intended that students planning to enroll in CHEM 130 who have had little or no previous chemistry laboratory enroll concurrently in CHEM 125 and CHEM 126.</p> <p><i>Hours per week and format</i></p> <p><small>Pre-lab reading and questions are completed prior to each multi-period project lab. A 1-hr lecture provides support for the topics and problems that will be investigated in the lab. The second component is performance in the 3-4 hour lab period where team data are shared, analyzed, and evaluated. The third begins in the first hour following completion of each multi-period project lab where groups communicate their findings during a student-led discussion.</small></p>

SUPPLEMENTARY QUESTIONS

<p><i>Equipment / Facilities</i></p> <p>No</p>	<table border="0"> <tr> <td><i>GSI's</i></td> <td align="right"><i>Requested FTE</i></td> <td align="right">50%</td> </tr> <tr> <td colspan="3"> Introducing and supervising laboratory procedures, attending lecture, leading discussions, grading lab reports, proctoring and grading exams. Departmental GSI training, mentoring by GSM, weekly staff meetings. </td> </tr> </table>	<i>GSI's</i>	<i>Requested FTE</i>	50%	Introducing and supervising laboratory procedures, attending lecture, leading discussions, grading lab reports, proctoring and grading exams. Departmental GSI training, mentoring by GSM, weekly staff meetings.		
<i>GSI's</i>	<i>Requested FTE</i>	50%					
Introducing and supervising laboratory procedures, attending lecture, leading discussions, grading lab reports, proctoring and grading exams. Departmental GSI training, mentoring by GSM, weekly staff meetings.							

Meeting the "4+4" premedical admissions requirements at UM

Currently	Proposed
Chem 130 (3 cr; Gen Chem I)* Chem 125 (2 cr; Gen Chem Lab)*	Chem 130 (3 cr; Gen Chem I)** Chem 125 (1 cr; Gen Chem Lab I)** Chem 126 (1 cr; Gen Chem Lab II)**
Chem 210 (4 cr; Org Chem I) Chem 211 (1 cr; Org Chem Lab I) Chem 215 (3 cr; Org Chem II) Chem 216 (2 cr; Org Chem Lab II)	Chem 210 (4 cr; Org Chem I) Chem 211 (1 cr; Org Chem Lab I) Chem 210 (3 cr; Org Chem II) Chem 211 (2 cr; Org Chem Lab II)
Chem 230 (3 cr; intro P-Chem)	Chem 230 (3 cr; intro P-Chem)

* notes:

- students with AP 4/5 in chemistry may begin in Chem 210/211 & receive credit for Chem 130/125;
- students with AP 3 AND placement (testing) into Chem 210/211 receive credit for Chem 130/125;
- students without AP but who place into Chem 210/211 receive a waiver letter that permits them to say they have satisfied the Chem 130/125 requirement by testing, and this is acceptable to the medical admissions process

** the credit and waiver formally associated with Chem 125 needs to apply to Chem 125/126

Major client departments for Chem 125/126 are students in Engineering and LSA (mainly future EEB & MCDB concentrators)

Course Approval Forms

COURSE APPROVAL FORMS

For April 1, 2003 CoE CC Meeting

- AERO 215 Modification – Changing Course Number from 285, Changing Title; Changing Course Description; Changing Prerequisites from: Preceded by Math 215 and MSE 220. Preceded or accompanied by Aero 245. **to: Preceded by Math 216 and MSE 220. Preceded or accompanied by Aero 245;** Changing Contact hrs/wk from 5.0 **to: 4.5.**
- AUTO 503 Modification – Changing Course Description; Changing Level of Credit from: Non-Rackham Grad and Undergrad or Rackham Grad **to: Non-Rackham Grad.**
- EECS 584(X-Listed with CS 584) Modification – Changing Course Description; Changing Credit hours and Contact Hours from: 3 **to: 4.**
- ENGR 302 Modification – Changing Course Title; Changing Course Description
- ENGR 401(X-Listed with MFG 401) Deletion
- IOE 623 (X-Listed with MATH 623) **MATH HOME DEPT.** New Course
- MFG 503(X-Listed with OM 703) Modification – Changing Course Description; Changing grading from: S/U **to: A-E.**



Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:

- New Courses - B & C completely
- Modifications - A modified information, B & C completely
- Deletions - A & C completely

Date 1/22/2003

Effective Fall 2003

A. CURRENT LISTING

B. REQUESTED LISTING

<input checked="" type="checkbox"/>	Home Department Aerospace Engineering	Div # 235	Course Number 285		Home Department Aerospace Engineering	Div # 235	Course Number 215			
	Cross Listed Course Information					Cross Listed Course Information				
<input checked="" type="checkbox"/>	Course Title Introduction to Solid Mechanics and Design					Course Title Introduction to Solid Mechanics and Aerospace Structures				
	TITLE ABBRE- VIATION	Time Sched Max = 19 Spaces	Intro Solid Mech&Des		TITLE ABBRE- VIATION	Time Sched Max = 19 Spaces	Solid Mech&AE Struc			
		Transcript Max = 20 Spaces	Solid Mech&Des			Transcript Max = 20 Spaces	Solid Mech&AE Struc			
<input checked="" type="checkbox"/>	Course Description An introduction to the fundamental phenomena of solid and structural mechanics in Aerospace systems. Includes analysis, numerical simulation and experiments and an introduction to design.					Course Description for Official Publication (Max = 50 words) An introduction to the fundamental phenomena of solid and structural mechanics in Aerospace systems. Includes analysis and numerical methods of solutions used for design of thin-walled Aerospace structures. Emphasis is placed on understanding behavior particular to thin-walled structures.				
	PROGRAM OUTCOMES: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input type="checkbox"/> k					PROGRAM OUTCOMES: <input checked="" type="checkbox"/> a <input type="checkbox"/> b <input checked="" type="checkbox"/> c <input type="checkbox"/> d <input checked="" type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input checked="" type="checkbox"/> k				
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<input checked="" type="checkbox"/>	Prerequisites Preceded by Math 215 and MSE 220. Preceded or accompanied by Aero 245 <input type="radio"/> Enforced <input type="radio"/> Advised					Prerequisites Preceded by Math 216 and MSE 220. Preceded or accompanied by Aero 245 <input type="radio"/> Enforced <input checked="" type="radio"/> Advised				
	Credit Restrictions					Credit Restrictions				
<input checked="" type="checkbox"/>	Level of Credit <input type="checkbox"/> Undergrad only <input type="checkbox"/> All Credit types <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Rackhm Grad w/add'l Work <input type="checkbox"/> Non-Rackhm Grad <input type="checkbox"/> Ugrad or Rackhm Grad <input type="checkbox"/> Ugrad or Non-Rackhm Grad		Credit Hours Min Max <u>4</u> <u>4</u>		Contact Hrs/Wk 5.0 Number of Wks		Level of Credit <input checked="" type="checkbox"/> Undergrad only <input type="checkbox"/> All Credit types <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Rackhm Grad w/add'l Work <input type="checkbox"/> Non-Rackhm Grad <input type="checkbox"/> Ugrad or Rackhm Grad <input type="checkbox"/> Ugrad or Non-Rackhm Grad		Contact Hrs/Wk 4.5 Number of Wks	
<input type="checkbox"/>	Repeatability (Indi Research, Dir. Study, Dissertation): Is this course repeatable? <input type="radio"/> Yes <input checked="" type="radio"/> No Maximum Hours? _____ Maximum Times? _____ Can it be repeated in the same term? <input type="radio"/> Yes <input checked="" type="radio"/> No					Printing Information (Optional) <input type="checkbox"/> Print the course in the Bulletin <input type="checkbox"/> Print the course in the Time Schedule				
<input type="checkbox"/>	Class Type(s) <input checked="" type="checkbox"/> Lec <input type="checkbox"/> Rec <input type="checkbox"/> Sem <input type="checkbox"/> Lab <input type="checkbox"/> Dis <input type="checkbox"/> Ind <input type="checkbox"/> Other _____		Graded Section <input type="checkbox"/> Lec <input type="checkbox"/> Rec <input type="checkbox"/> Sem <input type="checkbox"/> Lab <input type="checkbox"/> Dis <input type="checkbox"/> Ind <input type="checkbox"/> Other _____		Grading <input checked="" type="checkbox"/> A-E <input type="checkbox"/> CR/NC <input type="checkbox"/> S/U <input type="checkbox"/> P/F <input type="checkbox"/> Y		Location <input checked="" type="checkbox"/> Ann Arbor <input type="checkbox"/> Biological Station <input type="checkbox"/> Camp Davis <input type="checkbox"/> Extension		Terms & Freq. of Offering <input checked="" type="checkbox"/> I <input checked="" type="checkbox"/> II <input type="checkbox"/> IIIa <input type="checkbox"/> IIIb <input type="checkbox"/> III <input checked="" type="checkbox"/> Yearly <input type="checkbox"/> Alter Years <input type="checkbox"/> Even Years <input type="checkbox"/> Odd Years Half term <input type="checkbox"/> 1st <input type="checkbox"/> 2nd	
	Cognizant Faculty Member: _____ Title Professor					Cognizant Faculty Member: <u>Anthony M. Waas</u> Title <u>Professor</u>				
	Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty					Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty				

Approval

- Curriculum Comm. _____
- Faculty _____
- Rackham _____
- Cross listed Unit 1 _____
- Cross listed Unit 2 _____

Submitted By: Home Dept. Cross-listed Dept.

Name, Signature & Department
 Home Dept. Iain Boyd Iain Boyd, Aerospace Engineering
 Cross-listed Dept(s). _____



Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:
 New Courses - B & C completely
 Modifications - A modified information, B & C completely
 Deletions - A & C completely

Date 3/25/2003
 Effective Winter 2003

A. CURRENT LISTING

B. REQUESTED LISTING

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Home Department AUTO</td> <td style="width: 10%;">Div # 240</td> <td style="width: 60%;">Course Number 503</td> </tr> <tr> <td colspan="3">Cross Listed Course Information</td> </tr> <tr> <td colspan="3">Course Title Automotive Capstone Project</td> </tr> <tr> <td style="width: 10%;">TITLE ABBRE- VIATION</td> <td style="width: 15%;">Time Sched Max = 19 Spaces</td> <td>Automotive Eng Project</td> </tr> <tr> <td></td> <td>Transcript Max = 20 Spaces</td> <td>AUTOENG Project</td> </tr> <tr> <td colspan="3"> Course Description This capstone project course is intended to provide students with an industrially-relevant team project experience in automotive engineering </td> </tr> <tr> <td colspan="3">PROGRAM OUTCOMES:</td> </tr> <tr> <td colspan="3"> <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input type="checkbox"/> k </td> </tr> <tr> <td colspan="3"> Degree Requirements <input checked="" type="radio"/> Degree Requirement <input type="radio"/> Tech Elective <input checked="" type="radio"/> Core Course <input type="radio"/> Other <input type="radio"/> Free Elective </td> </tr> <tr> <td colspan="3">Prerequisites permission of the department <input type="radio"/> Enforced <input type="radio"/> Advised</td> </tr> <tr> <td colspan="3">Credit Restrictions none</td> </tr> <tr> <td colspan="2"> Level of Credit <input type="checkbox"/> Undergrad only <input type="checkbox"/> All Credit types <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Rackhm Grad w/add'l Work <input checked="" type="checkbox"/> Non-Rckhm Grad <input checked="" type="checkbox"/> Ugrad or Rckhm Grad <input type="checkbox"/> Ugrad or Non-Rckhm Grad </td> <td> Credit Hours Min Max 3 4 Contact Hrs/Wk 3 Number of Wks 14 </td> </tr> </table>	Home Department AUTO	Div # 240	Course Number 503	Cross Listed Course Information			Course Title Automotive Capstone Project			TITLE ABBRE- VIATION	Time Sched Max = 19 Spaces	Automotive Eng Project		Transcript Max = 20 Spaces	AUTOENG Project	Course Description This capstone project course is intended to provide students with an industrially-relevant team project experience in automotive engineering			PROGRAM OUTCOMES:			<input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input type="checkbox"/> k			Degree Requirements <input checked="" type="radio"/> Degree Requirement <input type="radio"/> Tech Elective <input checked="" type="radio"/> Core Course <input type="radio"/> Other <input type="radio"/> Free Elective			Prerequisites permission of the department <input type="radio"/> Enforced <input type="radio"/> Advised			Credit Restrictions none			Level of Credit <input type="checkbox"/> Undergrad only <input type="checkbox"/> All Credit types <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Rackhm Grad w/add'l Work <input checked="" type="checkbox"/> Non-Rckhm Grad <input checked="" type="checkbox"/> Ugrad or Rckhm Grad <input type="checkbox"/> Ugrad or Non-Rckhm Grad		Credit Hours Min Max 3 4 Contact Hrs/Wk 3 Number of Wks 14	<table border="1" style="width: 100%; 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Class Type(s) <input type="checkbox"/> Lec <input type="checkbox"/> Rec <input type="checkbox"/> Sem <input type="checkbox"/> Lab <input type="checkbox"/> Dis <input checked="" type="checkbox"/> Ind <input type="checkbox"/> Other _____ Graded Section <input type="checkbox"/> Lec <input type="checkbox"/> Rec <input type="checkbox"/> Sem <input type="checkbox"/> Lab <input type="checkbox"/> Dis <input type="checkbox"/> Ind <input type="checkbox"/> Other _____ Grading <input type="checkbox"/> A-E <input type="checkbox"/> CR/NC <input checked="" type="checkbox"/> S/U <input type="checkbox"/> P/F <input type="checkbox"/> Y Location <input checked="" type="checkbox"/> Ann Arbor <input type="checkbox"/> Biological Station <input type="checkbox"/> Camp Davis <input type="checkbox"/> Extension			Terms & Freq. of Offering <input checked="" type="checkbox"/> I <input checked="" type="checkbox"/> II <input type="checkbox"/> IIIa <input type="checkbox"/> IIIb <input checked="" type="checkbox"/> III <input type="checkbox"/> Yearly <input type="checkbox"/> Alter Years <input type="checkbox"/> Even Years <input type="checkbox"/> Odd Years Half term <input type="checkbox"/> 1st <input type="checkbox"/> 2nd Cognizant Faculty _____ Hwei Peng _____ Title Associate Professor Member: _____ Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty																																																																						

Approval

- Curriculum Comm. _____
- Faculty _____
- Rackham _____
- Cross listed Unit 1 _____

Submitted By: Home Dept. Cross-listed Dept.

Name, Signature & Department
 Home Dept. Hwei Peng *Hwei Peng*
 Cross-listed Dept(s): _____

SUPPORTING STATEMENT

1. The following course description modification is requested to allow the course designation to also be used for curriculum practicum training as part of the program requirement.

2. The course level of credit was modified to only allow non-rackham students to participate in the course.

Are any special resources or facilities required for this course? Yes No

Detail the Special requirements



Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:

- New Courses - B & C completely
- Modifications - A modified information, B & C completely
- Deletions - A & C completely

Date 3/21/2003

Effective _____

A. CURRENT LISTING

B. REQUESTED LISTING

Home Department Engineering		Div # 258	Course Number 401	Home Department		Div #	Course Number
Cross Listed Course Information Manufacturing		275	401	Cross Listed Course Information			
Course Title Total Quality Management		Course Title					
TITLE ABBREVIATION	Time Sched Max = 19 Spaces	TQM		TITLE ABBREVIATION	Time Sched Max = 19 Spaces		
	Transcript Max = 20 Spaces	TQM			Transcript Max = 20 Spaces		
Course Description The technical and management aspects of total quality management. Topics include voice of the customer, metrics, cross-functional teams, and systems aspects. Examples from engineering and business operations such as dimensional tolerancing, quality function deployment, process control, simultaneous engineering, lean production, purchasing, inventory control, and scheduling systems.				Course Description for Official Publication (Max = 50 words)			
PROGRAM OUTCOMES:				PROGRAM OUTCOMES:			
<input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input type="checkbox"/> k				<input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input type="checkbox"/> k			
Degree Requirements		<input type="radio"/> Degree Requirement <input type="radio"/> Core Course		<input type="radio"/> Free Elective <input checked="" type="radio"/> Tech Elective		<input type="radio"/> Other	
Prerequisites None <input type="radio"/> Enforced <input type="radio"/> Advised				Prerequisites <input type="radio"/> Enforced <input type="radio"/> Advised			
Credit Restrictions				Credit Restrictions			
Level of Credit		Credit Hours	Contact Hrs/Wk	Level of Credit		Credit Hours	Contact Hrs/Wk
<input type="checkbox"/> Undergrad only	<input type="checkbox"/> Ugrad or Non-Rckhm Grad	Min	Max	<input type="checkbox"/> Undergrad only	<input type="checkbox"/> Ugrad or Non-Rckhm Grad	Min	Max
<input type="checkbox"/> Rackham Grad	<input checked="" type="checkbox"/> All Credit types	3	3	<input type="checkbox"/> Rackham Grad	<input type="checkbox"/> All Credit types		
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		<input type="radio"/> Other _____					
				Cognizant Faculty Member: <u>Walton M. Hancock</u>		Title <u>Professor</u>	
Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty							

Approval

- Curriculum Comm.
- Faculty
- Rackham
- Cross listed Unit 1
- Cross listed Unit 2

Submitted By: Home Dept. Cross-listed Dept.
 Name, Signature & Department
 Home Dept. Gary D. Herrin, Engineering Division
 Cross-listed Dept(s). Jack Hu, Program in Manufacturing



Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:

- New Courses - B & C completely
- Modifications - A modified information, B & C completely
- Deletions - A & C completely

Date 10/7/2002

Effective _____

A. CURRENT LISTING

B. REQUESTED LISTING

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"><input checked="" type="checkbox"/> Home Department MATH</td> <td style="width: 10%;">Div # 429</td> <td style="width: 60%;">Course Number 623</td> </tr> <tr> <td colspan="3">Cross Listed Course Information</td> </tr> <tr> <td colspan="3">Course Title Computational Finance</td> </tr> <tr> <td style="width: 10%;">TITLE ABBREVIATION</td> <td style="width: 15%;">Time Sched Max = 19 Spaces</td> <td style="width: 75%;">Transcript Max = 20 Spaces</td> </tr> <tr> <td colspan="3">Course Description</td> </tr> <tr> <td colspan="3">PROGRAM OUTCOMES: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input type="checkbox"/> k</td> </tr> <tr> <td colspan="3">Degree Requirements <input type="radio"/> Degree Requirement <input type="radio"/> Free Elective <input type="radio"/> Other <input type="radio"/> Core Course <input type="radio"/> Tech Elective</td> </tr> <tr> <td colspan="3">Prerequisites <input type="radio"/> Enforced <input type="radio"/> Advised</td> </tr> <tr> <td colspan="3">Credit Restrictions</td> </tr> <tr> <td style="width: 30%;">Level of Credit <input type="checkbox"/> Undergrad only <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Non-Rackham Grad <input type="checkbox"/> Ugrad or Rackham Grad</td> <td style="width: 10%;">Ugrad or Non-Rackham Grad <input type="checkbox"/> All Credit types <input type="checkbox"/> Rackham Grad w/add'l Work</td> <td style="width: 60%;">Credit Hours Min Max Contact Hrs/Wk Number of Wks</td> </tr> </table>	<input checked="" type="checkbox"/> Home Department MATH	Div # 429	Course Number 623	Cross Listed Course Information			Course Title Computational Finance			TITLE ABBREVIATION	Time Sched Max = 19 Spaces	Transcript Max = 20 Spaces	Course Description			PROGRAM OUTCOMES: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input type="checkbox"/> k			Degree Requirements <input type="radio"/> Degree Requirement <input type="radio"/> Free Elective <input type="radio"/> Other <input type="radio"/> Core Course <input type="radio"/> Tech Elective			Prerequisites <input type="radio"/> Enforced <input type="radio"/> Advised			Credit Restrictions			Level of Credit <input type="checkbox"/> Undergrad only <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Non-Rackham Grad <input type="checkbox"/> Ugrad or Rackham Grad	Ugrad or Non-Rackham Grad <input type="checkbox"/> All Credit types <input type="checkbox"/> Rackham Grad w/add'l Work	Credit Hours Min Max Contact Hrs/Wk Number of Wks	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Home Department MATH</td> <td style="width: 10%;">Div # 428</td> <td style="width: 60%;">Course Number 623</td> </tr> <tr> <td colspan="3">Cross Listed Course Information IOE</td> </tr> <tr> <td colspan="3">Course Title Computational Finance</td> </tr> <tr> <td style="width: 10%;">TITLE ABBREVIATION</td> <td style="width: 15%;">Time Sched Max = 19 Spaces</td> <td style="width: 75%;">COMPUTATIONAL FINANCE COMPUTATIONAL FINANCE</td> </tr> <tr> <td colspan="3">Course Description Course Description for Official Publication (Max = 50 words) This is a course in computational methods in finance and financial modelling. 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- Approval
- Curriculum Comm.
 - Faculty
 - Rackham
 - Cross listed Unit 1
 - Cross listed Unit 2

Submitted By: Home Dept. Cross-listed Dept.

Name, Signature & Department

Home Dept. *Mattias Jonsson* IMath

Cross-listed Dept(s). *Jussi Keppo* IOE

SUPPORTING STATEMENT

The field of computational finance is a rapidly rising field in academic and industry circles. There is a growing need for students with such skills. This course will fill this demand and fits into the interdisciplinary program in Financial Engineering.

The FE curriculum committee has suggested that we cross-list this course in IOE because there is a high demand for this course and because this course fits well into IOE department. Math 623 considers numerical methods in finance and many IOE and FE students are interested in this course. The course is a natural extension to IOE552. FE is one area in IOE and the demand is high among IOE students.

Are any special resources or facilities required for this course?

Yes No

Detail the Special requirements



Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:

- New Courses - B & C completely
- Modifications - A modified information, B & C completely
- Deletions - A & C completely

Date 3/25/2003

Effective Winter 2003

A. CURRENT LISTING

B. REQUESTED LISTING

<input type="checkbox"/> Home Department MFG Div # 275 Course Number 503 Cross Listed Course Information OM 081 703 Course Title Manufacturing Project <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">TITLE ABBREVIATION</td> <td style="width: 15%;">Time Sched Max = 19 Spaces</td> <td style="width: 70%;">Manufacturing Project</td> </tr> <tr> <td></td> <td>Transcript Max = 20 Spaces</td> <td>Mfg Project</td> </tr> </table> Course Description This project course is intended to provide students with an industrially-relevant team project experience in manufacturing.	TITLE ABBREVIATION	Time Sched Max = 19 Spaces	Manufacturing Project		Transcript Max = 20 Spaces	Mfg Project	<input type="checkbox"/> Home Department MFG Div # 275 Course Number 503 Cross Listed Course Information OM 081 703 Course Title Manufacturing Project <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">TITLE ABBREVIATION</td> <td style="width: 15%;">Time Sched Max = 19 Spaces</td> <td style="width: 70%;">Manufacturing Project</td> </tr> <tr> <td></td> <td>Transcript Max = 20 Spaces</td> <td>Mfg. Project</td> </tr> </table> Course Description for Official Publication (Max = 50 words) This project course is intended to provide students with an industrially-relevant team project work experience in manufacturing.	TITLE ABBREVIATION	Time Sched Max = 19 Spaces	Manufacturing Project		Transcript Max = 20 Spaces	Mfg. Project
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Approval

Curriculum Comm. _____

Faculty _____

Rackham _____

Cross listed Unit 1 _____

Submitted By: Home Dept. Cross-listed Dept.

Name, Signature & Department
 Home Dept. S. Jack Hu S. Jack Hu / hu
 Cross-listed Dept(s). James Reece James Reece / hu

SUPPORTING STATEMENT

1. The following course description modification is requested to allow this course to be used for curriculum practicum training as part of the program requirement for graduation.

2. The following grading modification is requested from S/U to graded A-E. We believe the overall level of project effort and accomplishment will be enhanced with letter-graded projects. Our belief is based on feedback we obtained from faculty co-advisors and TML students after completion of their projects. Letter-graded projects give faculty co-advisors a better mechanism to distinguish between outstanding versus fair/poor project reports, which also gives the students an opportunity for recognition of good work and further motivation to submit better reports. Otherwise, the tendency we have observed over the years is that all the project reports receive a pass % and there is less motivation for the students to do a better job, and no formal mechanism to recognize outstanding reports. The reaction to our proposal from faculty who served in the past as summer project co-advisors was positive.

Letter-graded project reports also have a secondary benefit. They allow co-advisors to assign different grades to different members of the same team when such action is justified. In cases of unprofessional behavior by an individual team member, for example, this person may be given a grade lower than that awarded the project. All such assessments will, of course, be based on team members evaluating themselves and each other as well as input from faculty co-advisors. Unprofessional behavior% includes (but is not limited to) not carrying a fair share of the team's workload, creating substantial dissonance within the team, and interacting with sponsor personnel in a discourteous or immature manner. On the other hand, if in addition to performing his/her own share of the work a team member ends up doing a substantial amount of work that was originally assigned to someone else, that person can be recommended for a grade higher than that given the project/team. Letter graded reports allow for such differences in team members grades while the pas/fail system does not.

Are any special resources or facilities required for this course? Yes No

Detail the Special requirements

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