The University of Michigan College of Engineering Curriculum Committee

Agenda December 17, 2002 1:30-3:30 p.m. GM ROOM Fourth Floor Lurie Engineering Center

- 1. Approval of Minutes from November 19, 2002 Meeting
- 2. Discussion of Expanded CC Authority When Deciding College-Wide Curriculum Issues
- 3. Science Liaison Experience Presentation by Phil Savage
- 4. Psychology Sequencing Discussion
- 5. HU/SS Requirements Fulfilled from Non LS&A School and Colleges
- 6. Report on LS&A Curriculum Committee Meetings Jeanne Murabito
- 7. Request for Change in Chem E Biology/Life Science Requirement Susan Montgomery
- 8. Course Approval Forms

University of Michigan College of Engineering Curriculum Committee Meeting Tuesday, November 19, 2002 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, E. Chan, V. Chung, J. Fessler, P. Friedmann, W. Hansen, G. Herrin, J.Holloway, G. Hulbert, S. Montgomery, B. Noble, H. Peng, R. Robertson, P. Samson, S. Takayama

Members Absent: S. Pang

Guests: Henia Kamil, Nik Kapodes

The minutes of the last meeting were approved

Math Liaison Experience – Nik Katapodes

Nik Katapodes talked about his experience serving as math liaison for 5 years. He said having math liaisons did accomplish a few good things in ABET 2000—good remarks from ABET re: communication with the Math department. Labs and manuals for Math 215/216 were revised and they created an effective Power Point presentation.

Once the funding ended the presentations ended. Then a GSI was hired with grant money to continue the presentations. Nik stated that this position is vital.

Susan Montgomery suggested that the liaison could serve in the role of an ombudsperson. Nik Kapopodes said that students aren't taught mechanics. Susan Montgomery said that the next challenge Nik added that on the other end – the Honor's course are very good, but the average student ends up being poorly instructed. Gary Herrin noted that there is a problem with retention in Honor's courses. It was noted that the best teachers are in the Honor's courses, and the regular courses are service courses.

Nik stated that the math department is receptive to working with the College of Engineering. Gary Herrin asked if anyone has a joint appointment. The answer was no, but Nik Kapodes said that is a good idea. He stated that math 471 is a very good course, but math 371 is not as good, and math 450 needs major changes.

Armin Troesch said there should be follow up on this. Jeanne Murabito said that she wrote a draft but wants to incorporate Nik's comments into it.

It was decided to have a committee to work on this with Gary Herrin, James Holloway, and Susan Montgomery. Jeanne Murabito will call the meeting.

Potential Changes in ME 230, ME 300 - Greg Hulbert

Greg Hulbert gave a presentation on the sequence of courses.

This proposal will come to the CoE Curriculum Committee in January.

Twelve faculty teach courses – students say there is no consistency. This has an impact on the students who go on to graduate school. Too much information in too little a period of time. Recommendation – to back to 3 separate required 3-credit classes.

Will Hansen Presentation on CEE Concentrations—Revisited

Will Hansen stated that he went back to his department and they added one more course for each subject area. 12 hours or 4 courses.

Armin Troesch asked if these courses are offered every year. Will said that CEE 521 and 527 are offered alternate even years. It was asked if one of those could switch to odd years.

Armin Troesch asked for a motion to approve the CEE Concentrations Proposal. Discussion: James Holloway asked for the definition of **Geo Technical**: **Soil Mechanics**. Motion carried (approved).

Course Approvals

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

Motion Carried (approved)

CHEM E 596 Modfication – Changing Title; Changing Description

EECS 311 Modification – Changing Pre-Reqs

IOE 517 Deletion

ME 561 Modification – Removing AERO cross-listing; Changing Pre-Regs

Adjournment: Motion to adjourn was made and seconded

Motion carried (approved)

Next Meeting

Tuesday, December 17, 2002

1:30-3:30 p.m. GM Room-LEC

Wolfe, Judy

To: Subject: Armin Walter Troesch
Request for Rules Change (fwd)

----- Forwarded message ------

Date: Tue, 10 Dec 2002 11:37:10 -0500

From: "Jenkins, Janice" <jenkins@engin.umich.edu>

To: James Wilkes <wilkes@umich.edu>

Cc: "Director, Stephen W." <director@umich.edu>, troesch@umich.edu,

"Sweigert, Martha" <sweigert@engin.umich.edu>

Subject: RE: Request for Rules Change

As you know, I'm sure, a quorum is necessary to transact business. I'm not sure you can 'suspend rules' to override the quorum requirement. If you want me to look this up I will, but I'd suggest you forget it. If a motion was passed during this 'suspension' and there was no challenge, you're probably clear. Bottom line (cynically) is that without a challenge, you can probably do anything you want to. Notice, I said without a challenge.

Robert says 'instead of a formal motion to suspend the rules, it is more usual to ask for general consent to do business...' and if no one objects, the chair directs 'the member to proceed just as if the rules had been suspended.' I trust that was the case, i.e., agreement by the body.

As far as the future is concerned, the issue of a quorum is paramount. I'm disinclined (for the reasons you mention) to endorse a change of the quorum number, but given the meager attendance by the faculty, perhaps it is a necessity. Typically, worst case scenario, is 10% of membership (endorsed by Robert). Given past participation, maybe that's the number. That's sad (my editorial comment), but maybe it's the truth.

It will require a Bylaws amendment for sure. (I'm just giving top of the head advice here. My COE Bylaws are in Ann Arbor and I am not.) But quorum requirements are typically Bylaws rules. Yet COE Bylaws are weird and different from most I'm acquainted with. Hey, they even violate the Regents' Bylaws, for christ sake. We just do it our own way, the university be damned. Our disagreement with university rules is so gross, I can't believe we get by with it. Sorry, I'm a rule-based person. Maybe a female trait.

Remember, amendments must be publicized in advance of the meeting, and can't undergo further 'amendments' at the meeting. You can only vote on those publicized. So the proposed changes need to be crafted well in advance of the Feb meeting. I will be returning to Ann Arbor somewhat regularly next year, but probably not until mid or late January. I can probably get my secretary to send me my copy of the Bylaws if you need further advice before then.

I retire on 31 Dec 2002. Retirees can't serve as committee members. Do you know what the plan is to replace me? I think Director can do that with a simple interim appointment.

----Original Message----

From: James Wilkes [mailto:wilkes@umich.edu] Sent: Tuesday, December 03, 2002 2:26 PM

To: jenkins@umich.edu

Cc: Director, Stephen W.; troesch@umich.edu

Subject: Request for Rules Change

Janice:

Sorry to trouble you near your retirement, but if you don't have time to take action yourself, would you please forward this request to your successor or another member of the Rules Committee and make sure that the wheels are actively set in motion?

You may recall that I succeeded you as the parliamentarian at the CoE faculty meetings. At such a meeting yesterday, we were challenged as to whether or not a quorum existed. It did not - we had about 35 and 60 are

needed. (No members of the Rules Committee were present.) We voted to suspend the quorum requirement for that one meeting (a somewhat dubious procedure) before then voting on some items, none of which was of great importance. But one day there might be something really important, and we

want to do the right thing in the event of any legal challenge.

Therefore, Dean Director and I request that the Rules Committee propose a revision to the rules in such a way that will:

- 1. Enable the faculty to conduct (i.e., not prohibit) business at the CoE meetings, even though there may only be 20 or 30 faculty members (or perhaps even fewer) present.
- 2. Still protect the faculty as a whole from something being railroaded through by a handful of members.
- I have some suggestions, but would prefer that the Rules Committee take the initiative. If necessary, I would be glad to meet with the

committee (except for the three weeks starting 15 January). An ideal timetable

would

be for the Rules Committee to have something concrete to present at the

be for the Rules Committee to have something concrete to present at the next

faculty meeting - presumably in February 2003. After discussion at that meeting, a proposed rules change could then be submitted for vote by the whole faculty.

Please tell me what you can do to get this needed change implemented, with copies to:

Steve Director: director@umich.edu

Armin Troesch: troesch@umich.edu (Curriculum Committee)

Martha Sweigert: sweigert@engin.umich.edu

Many thanks, best regards, and happy retirement - I remember you telling me last year about your lovely view over Lake Michigan.

Jim Wilkes

P.S. I'm sending a blind copy of this to Martha - my e-mail only had room for two carbon copies.

To: Murabito, Jeanne

Subject: RE: Psychology Series

----Original Message----From: Fichialos, Jill

Sent: Tuesday, December 03, 2002 12:05 PM

To: Herrin, Gary

Subject: RE: Psychology Series

You may want to consider dropping the requirement to 200 level courses (instead of 300). If you think about it, a 300 level course is likely to have 2 pre-requisite courses (a 100 level and a 200 level). At least that is the case with most of our 300 level courses. OR require a sequence of 3 courses. In psychology we have made an effort to have the 300 level courses geared toward students who are concentrators in psychology or who have an "advanced"/junior level knowledge of the discipline. I would assume the 200 level courses are better suited for engineering students who just want a "taste" of psychology. Hope that helps! Let me know if you have any questions!

Jill Wardle Fichialos Student Services Associate University of Michigan Psychology Undergraduate Office jillfi@umich.edu 1343 East Hall (734) 647-3723

> ----Original Message-----From: Herrin, Gary

Sent: Monday, December 02, 2002 7:06 PM **To:** Fichialos, Jill; gdherrin@caen.engin.umich.edu

Cc: Murabito, Jeanne

Subject: RE: Psychology Series

The HU/SS requirement is on pg 63 (top right hand side) of the following Engin Bulletin:

http://www.engin.umich.edu/students/bulletin/9ugprograms.pdf

We since many LSA courses were lowered in numbering from 300 level to 200 level it appears we (Engin) will need to revisit this rule. Perhaps you have a suggestion on how we might proceed that would meet the intent of the rule?

Gary D. Herrin, Ph.D.
Asst Dean for Undergraduate Education
1011 Lurie Engineering Center
The University of Michigan
Ann Arbor, Michigan 48109-2102

Office: 734-647-7105 Cell: 734-646-1100 FAX: 734-647-7126

-----Original Message-----From: Fichialos, Jill Sent: Monday, December 02, 2002 4:18 PM

To: gdherrin@caen.engin.umich.edu

Subject: Psychology Series

Hello, I need your assistance! We are seeing a lot of engineering students who have questions about the "psychology series" that is a requirement in the engineering school. Unfortunately, none of my staff or advisors know much about this requirement. The students claim that they have been referred to us by an engineering advisor. Is there any particular person we could refer these students to? One of their big concerns seem to be that they are required to take an upper level psychology class, but for most of those classes there is a 200 level course listed as a pre-requisite. Any help with this matter would be appreciated. Thanks in advance!

Jill Wardle Fichialos Student Services Associate University of Michigan Psychology Undergraduate Office jillfi@umich.edu 1343 East Hall (734) 647-3723

Subject:

Psychology Series, HU/SS requirements and more (fwd)

----- Forwarded message -----Date: Tue, 3 Dec 2002 16:06:53 -0500

From: armin troesch <troesch@engin.umich.edu>
To: "Murabito, Jeanne" <murabito@engin.umich.edu>

Cc: troesch@engin.umich.edu

Subject: Re: Psychology Series, HU/SS requirements and more

Jeanne,

Yes, we need to put this on the agenda.

Also, the Faculty Meeting yesterday produced "interesting" results. There were the usual 25 or so interested faculty in attendance. When Steve asked for a vote to accept the minutes, it was pointed out that we did not have a quorum and thus the minutes could not be approved. The "less-than-a quorum" majority voted to waive the quorum requirements, much to the distress of several of the participants. This rule of "less-than-a quorum" majority carried over into the CC presentation, allowing for the passage of the all of the CC items brought forward for a vote. After the meeting, Steve requested that we talk to the Faulty Rules committee to see if we could DECREASE the number of issues that would be brought before the College Faculty for action. I told Steve that we, the CC, would discuss it and propose a change to the Rules Committee.

So.... the next agenda should include the formation of a proposal to INCREASE the number of actions that may be formally decided by the CC and DECREASE the number of issues that need to be brought to the full faculty for a vote.

Armin

p.s. Can we forward this to the whole CC to get the discussion process started?

On Tuesday, December 3, 2002, at 03:07 PM, Murabito, Jeanne wrote:

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> Subject: FW: Psychology Series
> ----Original Message-----
> From: Fichialos, Jill
> Sent: Tuesday, December 03, 2002 12:05 PM
> To:Herrin, Gary
> Subject: RE: Psychology Series
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> concentrators in psychology or who have an "advanced"/junior level
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> psychology.
> Hope that helps! Let me know if you have any questions!
>
>
> Jill Wardle Fichialos
> Student Services Associate
> University of Michigan
> Psychology Undergraduate Office
> jillfi@umich.edu
> 1343 East Hall
> (734) 647-3723
> ----Original Message----
> From: Herrin, Gary
> Sent: Monday, December 02, 2002 7:06 PM
> To: Fichialos, Jill; gdherrin@caen.engin.umich.edu
> Cc: Murabito, Jeanne
> Subject: RE: Psychology Series
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> Perhaps you have a suggestion on how we might proceed that would meet
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> Gary D. Herrin, Ph.D.
> Asst Dean for Undergraduate Education
> 1011LurieEngineeringCenter
> TheUniversityofMichigan
> Ann Arbor, Michigan 48109-2102
> Office: 734-647-7105
> Cell: 734-646-1100
> FAX: 734-647-7126
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> ----Original Message----

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> Jill Wardle Fichialos
> Student Services Associate
> University of Michigan
> Psychology Undergraduate Office
> jillfi@umich.edu
> 1343 East Hall
> (734) 647-3723
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Wolfe, Judy

To: Subject: Murabito, Jeanne RE: HU/SS question

----Original Message----

From: Sandy Swisher [mailto:sandys@umich.edu] Sent: Wednesday, December 04, 2002 10:34 AM

To: Murabito, Jeanne Subject: HU/SS question

I have a question for you. Would we have to accept the following course for humanities credit under new hu/ss rules. The reason I ask is that in the past we (ChE Department) have not allowed conversation courses. But I don't see any of the excepted designations described in #3 under the Definitions and Exceptions section of the new CoE HU/SS rules

GERMAN 306. Conversation Practice.

Instructor(s):

Prerequisites & Distribution: GERMAN 232; concurrent enrollment in a 300-level course is encouraged but not necessary. Students who have previously participated in a 400-level GERMAN conversation course may not register for GERMAN 305 or 306. (1). (Excl). Offered mandatory credit/no credit. This course does not satisfy the language requirement. May not be included in a concentration plan or minor in German. May not be repeated for credit.

Credits: (1).

Thanks Sandy

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Chemical Engineering Department University of Michigan

Date: December 12, 2002

To: College Curriculum Committee

From: Susan Montgomery, Chair, ChE Undergraduate Committee

Re.: Biology / life science requirement change

The Chemical Engineering department proposes a change to the definition of our undergraduate program's biology/life elective. The current description reads:

"Biology/Life science elective currently fulfilled by Biol. 162 (5 cr), with 2 credits going to free electives. Elective waived if bio-focused technical elective chosen. See department for list of eligible courses."

When working to formulate the list of courses that would allow a student to waive the bio/life science elective, we realized that our goal for this requirement was very specific, focusing on cell biology, and few technical elective courses would be appropriate to waive it. In addition, we felt that it would not be in the best interest of the students to reduce the total number of technical electives. For this reason, we'd like to change the description to read:

"See department for list of courses that satisfy the Biology/Life science elective."

For your information, the current list of courses that satisfy the elective include:

- Biology 162 Introductory Biology 5 credits, 2 go to free electives
- Biochemistry 415 (medical school) Requires 2 semesters of organic chemistry 3 credits.
- Biology 207 Introductory microbiology Officially requires Biology 162, students could take only with my permission, to ensure they have had appropriate high school biology background. For students with a strong biology background (AP level), Biology 162 is too simple and not appropriate. 4 credits, 1 goes to free electives.

COURSE APPROVAL FORMS

December 17, 2002

AERO 585	Modification – Changing Course Description; Changing Level of Credit; Changing Grading from S/U P/F to A-E
AOSS 171	Modification – Changing Home Department; Changing Title; Changing Course Description
AOSS 172	Modification – Changing Home Department; Changing Title; Changing Course Description
CHEM E 330	Modification – Changing Title
CHEM E 583	Deletion
EECS 401	Modification - Changing Pre-reqs.; Changing Credit Restrictions
EECS 425	Modification – Changing Pre-reqs.
EECS 546	Modification - Changing Terms and Frequency of Offering
IOE 633	Deletion

Course Approvals

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number 1003

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 11/19/2002 Effective Winter 2003

	A. CURRENT LISTING	B. REQUESTED LISTING	
	Home Department Div # Course Number	Home Department Div # Course Nun Aerospace Engineering 235 585	nber
	Cross Listed Course Information	Cross Listed Course Information	
	Course Title	Course Title Aerospace Engineering Seminar	
	TITLE Time Sched	TITLE Time Sched Agrospage Seminor	
	ABBRE- VIATION Transcript	ABBRE- Max = 19 Spaces / 15 Spaces	
	Max = 20 Spaces Course Description	Max = 20 Spaces / 10100 page Continual	
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C	Faculty Rackham Cross listed Unit 1	Cross-listed Dept(s).	
	Cross listed Unit 2		

Form	Number

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SUPPORTING STATEMENT

This course is a weekly seminar with a different speaker each week. Except for at most one internal speaker each term, the speakers will be individuals carrying out research and development activities in government, industry and university facilities outside the University of Michigan. The seminar series is designed to expose our students to a broader range of research and technoology issues than can be covered in formal course and research activities within the department. The students will do a short term paper of the seminar topics.
It was an oversight by the Department to not recognize this as a course appropriate for upper level undergraduate students when the original paperwork was submitted.
·
Are any special resources or facilities required for this course? ⊠ Yes □ No
Detail the Special requirements
This course is dependent on the facilities in the Boeing Lecture Hall (1109 FXB)

ID:

PACE

1/2

THE UNIVERSITY OF MICHIGAN - COLLEGE OF ENGINEERIN Course Approval Request

College Curriculum Committee, 1420 Lurie Engineering Center Build



Form Number 954

Action Requested

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

: completely

Date 6/10/2002

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Form	Number
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SUPPORTING STATEMENT	
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College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number 954

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

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

Date 6/10/2002 Effective Winter 2003

	A. CI	JRRENT LIST	ring			B. RE	QUESTED LI	STING			
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	Biology			328	110	Geology Sci	ence		377	171	
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	VIATION	Transcript	Global Chng			VIATION	Transcript	Global Chng			
		Max = 20 Spaces	Global Gring	<u></u>			Max = 20 Spaces	Global Offing		<u> </u>	
Х	Course Desc	ription				Course Descrip	tion for Official Publication	(Max = 50 words)			
Δ	The cour	rse will consider	the evolution of	the univers	e, the earth and			•	universe F	arth our	
	1		e evolution of liv		•		Students learn about the evolution of the universe, Earth, our changing environment and our planets living organisms. Global				
	J.	•	en to fundament	•	•	Change I,	which is part of t	he GC curriculu	m, assume:	s no prior	
	organisn	ns grow and repr	roduce, how they	/ interact w	ith their	science ba	ackground. Hom	ework and labo	ratories use	•	
	environn	nents, and the di	stribution of maj	or groups o	of organisms on		computer-based systems modeling and analysis, and includes a				
	environments, and the distribution of major groups of organisms on earth.					group pre		modelling and an	iaiyolo, ana	iliciados a	
	out in					group pre	Sentation.				
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	Degree Req	Ulrements O Degree O Core (e Requirement O Tech I Course O Other			Degree Requi	irements O Degree Re O Core Cou	equirement O Tech Ele	ctive		
		O Free E	lective				O Free Elec	tive			
	Prerequisites					Prerequisites					
		O Enforced O Advised	<u> </u>				O Enforced O Advised				
1	Credit Restrictions					Credit Restriction	ons				
						Lauret ad Orandi	74	· · · · · · · · · · · · · · · · · · ·			
	Level of Cre Undergrad		Credit types	Credit Hours	Contact	Level of Credi ☑ Undergrad on		dit hmac	Credit Hours	Contact	
	☐ Rackham (Grad □ Rck	hm Grad w/add'l Work	Min Max	Hrs/Wk	□ Rackham Gra	ad 🗆 Rokhm	Grad w/add'i Work	Min Max	Hrs/Wk	
	□ Non-Rckhn □ Ugrad or R				Number	☐ Non-Rckhm (☐ Ugrad or Rck					
	Ugrad or N	on-Rokhm Grad			of Wks	Ugrad or Non	-Rokhm Grad		4 4	Number of Wks	
										OI WKS	
C.			n, Dir. Study, Dissertation:	:		Printing Info		ourse in the Bulletin			
٠.	Is this course	e repeatable? O Yes	♠ No			(0	ptional) 🗵 Print the co	ourse in the Time Sched	ule		
	Махітил	Hours? Ma	ximum Times?								
	Can it be	repeated in the same ter	m? ○ Yes ○ No								
_	A 4		-		·	7	B. B. B.	—			
	Class Type(s) ⊠	Graded Lec Section Rec	⊙ Lec Grading ○ Rec		cation	Terms & 1	🗆 II 🚨 IIIa 🗖 IIIb	H III	н	alf term 1 1st 2nd	
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		Dis	O Ind □ P/F		ological Station amp Davis	Cognizant Facult	y Perr	y Samson	Title Profe	ssor	
	ä	Other	O Other D Y	□ E	tension	Member:	***************************************				
	!					Grad Course: Atta	ach nomination if Cogniza	nt raculty is not a regula	ar graduate faculty	'	
	Approval					Cub	mitted By: Home Dep	Cross Feld Done			
г] Curriculu	ım Comm				Name, Signature &		Orossansteu Dept.	1		
	Journoulu						A 0 0 0 /D 0 -	/ 6 /	<u></u>		
	_					Home Dept.	AOSS/Perry Sa	mso n			
] Faculty					Cross-listed Dept	(s). Environ/John Kr	nott \	1 .	//	
	Rackhan	n				F ·			1/1/1	//	
	_						.SNRE/David.Al		بريس رميس	· ·	
	Cross lis						.Geology/Joel.Bl				
	J Cross lis	ted Unit 2 🗡					.Biology/Deberat		٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠		
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Form Number

SUPPORTING STATEMENT
The home department should move from AOSS to Environ so that scheduling is centralized, as well as other needed arrangements
UC.crosslisting.no.longer.necesssary.
Are any special resources or facilities required for this course?
Detail the Special requirements

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number 954

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

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

Date 6/10/2002

Effective Winter 2003

	A. C	URRENT LIST	ING	20.01.01.0	- A & C comple	•	EQUESTED LI	STING		
	Home Depa							STING		
Х	1	eric, Oceanic, & Spa	ce Sciences	Div # 241	Course Number 171	Home Dep Program o	artment on the Environment		Div # 367	Course Number
	Cross Listed Course Information Geology Science Biology SNRE University Course			377 328 711 495	171 110 110 110	Cross Listed Course Information Atmospheric, Oceanic, & Space Science 24 Geology Science 33 Biology 32 SNRE 75				171 171 110 110
х	Course Title									
	Introduction of Global Change			Course Title Introduction of Global Change: Physical Processes						
	TITLE ABBRE-	Time Sched Max = 19 Spaces	Intro Global (Chng I		TITLE ABBRE-	Time Sched Max = 19 Spaces	Intro Global C	hng I	
	VIATION Course Desc	Transcript Max = 20 Spaces	Global Chng			VIATION	Transcript Max = 20 Spaces	Global Chng		
	its environments, and the evolution of living organisms. Consideration will be given to fundamental processes by which organisms grow and reproduce, how they interact with their environments, and the distribution of major groups of organisms on earth.					Change I science t compute group pro	environment and hywhich is part of to packground. Hom r-based systems resentation.	he GC curriculu ework and labo modeling and a	im, assume pratories use	s no prior
	PROGRAM OUTCOMES: □a □b □c □d □e □f □g □h □i □j □k				PROGRAM OUTCOMES: ☐ a ☐ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐ h ☐ i ☐ j ☐ k					
	Degree Req	uirements O Degree O Core Co O Free Ele	Requirement O Tech I ourse O Other			Degree Req		quirement O Tech Ele		
4	Prerequisites	○ Enforced ○ Advised				Prerequisites	O Enforced ⊙ Advised			
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	Level of Cred Undergrad of Rackham 6 Non-Rickhm Ugrad or Re Ugrad or No	only ☐ All Cr Grad ☐ Rckhi n Grad	edit types т Grad w/add1 Work	Credit Hours Min Max	Contact Hrs/Wk Number of Wks	Level of Cree Undergrad o Rackham G Non-Rckhm Ugrad or Rc Ugrad or No	nly □ All Cred rad □ Rckhm Grad khm Grad	iit types Grad w/add'l Work	Credit Hours Min Max 4 4	Contact Hrs/Wk Number of Wks
C.	Is this course Maximum	peatability (Indi Research, e repeatable? O Yes I Hours? Maxi repeated in the same term	No mum Times?	•		Printing Inf (C		urse in the Bulletin urse in the Tirne Schedu	ule	
	Class Type(s)	Rec	Lec Grading Rec Sem 🗵 A-E		cation	Freq. of	I 🗆 II 🗆 IIIa 🔘 IIIb 🖸			If term 1 1st 2nd
	0 0	Lab O	Lab □ CR/NO			Cognizant Facul Member:	Yearly Alter Years D ty Perry tach nomination if Cognizan	Samson	Title Profes	sor
		m Comm.				Sut Name, Signature Home Dept	omitted By: Home Dept. & Department AOSS/Perry San	Cross is ad Dept.		
	☐ Faculty ☐ Rackham ☐ Cross listed Unit 1 ☐ Cross listed Unit 2						nid lace/ytgoloak.	ott // Control of the	*******	

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

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

Date 6/10/2002 Effective Winter 2003

A. CURRENT LISTING B. REQUESTED LISTING Course Number Home Department Div# Home Department Div# Course Number Program on the Environment Atmospheric, Oceanic, & Space Sciences 241 171 367 110 Cross Listed Course Information Cross Listed Course Information Atmospheric, Oceanic, & Space Science 377 171 Geology Science 241 171 Biology 328 110 Geology Science 377 171 Biology SNRE 711 110 328 110 University Course 495 110 SNRE 110 Х Course Title Course Title Introduction of Global Change Introduction of Global Change: Physical Processes Time Sched Time Sched TITLE Intro Global Chng I TITLE Intro Global Chng I Max = 19 Spaces Max = 19 Spaces ABBRE ABBBBF-Transcript Max = 20 Spaces Transcript Max = 20 Spaces VIATION Global Chng VIATION Global Chng Course Description Course Description for Official Publication (Max = 50 words) Х The course will consider the evolution of the universe, the earth and Students learn about the evolution of the universe, Earth, our its environments, and the evolution of living organisms. changing environment and our planets living organisms. Global Change I, which is part of the GC curriculum, assumes no prior Consideration will be given to fundamental processes by which organisms grow and reproduce, how they interact with their science background. Homework and laboratories use environments, and the distribution of major groups of organisms on computer-based systems modeling and analysis, and includes a earth. group presentation. PROGRAM OUTCOMES: PROGRAM OUTCOMES: □ a □ b □ c □ d □ e □ f □ g □ h □ i □ j □ k □a □b □c □d □e □f □g □h □i □j □k O Degree Requirement
O Core Course
O Free Elective Degree Requirements O Tech Elective O Other O Degree Requirement O Tech Elective O Core Course O Other Degree Requirements Prerequisites Prerequisites O Enforced O Advised ○ Enforced ⊙ Advised Credit Restrictions Credit Restrictions Level of Credit Level of Credit Contact Credit Hours Credit Hours Contact ☐ Undergrad only ☐ Rackham Grad ☐ Non-Rckhm Grad ☐ All Credit types ☐ Rickhm Grad w/add'l Work Undergrad only Rackham Grad Non-Rickhm Grad ☐ All Credit types ☐ Rckhm Grad w/add'l Work Hrs/Wk Min Max Hrs/Wk Ugrad or Rckhm Grad
Ugrad or Non-Rckhm Grad Number ☐ Ugrad or Rckhm Grad ☐ Ugrad or Non-Rckhm Grad Number of Wks Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable? O Yes O No Maximum Hours? Maximum Times? Can it be repeated in the same term? ○ Yes ○ No O Lec O Rec O Sem O Lab O Dis O Ind O Other Terms & Freq. of Offering ■ | □ || □ || Illa □ || Illb □ || Ill Half term 1 1st 2nd Graded Class Grading ⊠ Lec ☐ Rec ☐ Sem ☒ Lab ☐ Dis ☐ Ind Type(s) Location A-E
CR/NC
S/U
P/F
Y ■ Yearly □ Alter Years □ Even Years □ Odd Years ☑ Ann Arbor☐ Biological Station☐ Camp Davis☐ Extension Cognizant Faculty Member: Perry Samson Title Professor ☐ Other Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty Approval Submitted By: Home Dept. Cross-isted Dept. □ Curriculum Comm. Name, Signature & Department AOSS/Perry Samso Home Dept. ☐ Faculty Cross-listed Dept(s). Environ/John Knott □ Rackham .SNRE/David.Allen.. ☐ Cross listed Unit 1 .Geology/Joel Blum... .Biology/Deborah.Goldberg. ☐ Cross listed Unit 2

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Deletions - A & C completely

Date <u>6/10/2002</u>

Effective Winter 2003

	A. cu	JRRENT LISTIN	IG			B. R E	EQUESTED LIS	STING		
[Home Depart			Div#	Course Number	Home Depa			Div#	Course Number
Х		ric, Oceanic, & Space	Sciences	241	171	Program o	on the Environment		367	110
-	Cross Listed Course Information 377 171 Geology Science 328 110 SNRE 711 110 University Course 495 110						Course Information ric, Oceanic, & Space cience	e Science	377 328	171 171 110 110
х	Course Title									
Ш		ion of Global Char	nge			Course Title Introduct	ion of Global Cha	ange: Physical Pr	ocesses	
	TITLE ABBRE-	Time Sched Max = 19 Spaces	Intro Global Chng I			TITLE ABBRE-	Time Sched Max = 19 Spaces Intro Global Chng I			
	VIATION	Transcript Max = 20 Spaces	Global Chng			VIATION	Transcript Max = 20 Spaces	Global Chng		
X	Course Description The course will consider the evolution of the universe, the earth and its environments, and the evolution of living organisms. Consideration will be given to fundamental processes by which organisms grow and reproduce, how they interact with their environments, and the distribution of major groups of organisms on earth.				Students changing Change science compute	ription for Official Publications learn about the earn about the earn around the earn around the earn around the earn around the earn around. However, based systems resentation.	evolution of the u d our planets livin the GC curriculur nework and labor	g organisms n, assumes atories use	s. Global no prior	
		RAM OUTCOM				PROG	RAM OUTCOM	IES:		· · · · · · · · · · · · · · · · · · ·
	☐ a ☐ Degree Req		e of g		i 🗆 j 🗆 k	□ a □			□ h □ i	□j □k
	Degree neq	O Core Co. O Free Ele	Requirement O Tech E O Other ctive	=iective		Degree He	quirements O Degree F O Core Cor O Free Ele	Requirement O Tech Electurse O Other ctive	tive	
	Prerequisites	S Enforced O Advised				Prerequisites	○ Enforced ⊙ Advise	ed	-	
	Credit Restric	tions				Credit Restri				· · · · · · · · · · · · · · · · · · ·
	Level of Cre		edit types	Credit Hours	Contact Hrs/Wk	Level of Cr ☑ Undergrad		edit types	Credit Hours	Contact
	☐ Rackham (☐ Non-Rckhr ☐ Ugrad or F☐ Ugrad or N	Grad □ Rckhm m Grad	n Grad w/add'l Work	Min Max	Number of Wks	☐ Rackham ☐ Non-Rckh ☐ Ugrad or F ☐ Ugrad or N	Grad □ Rckhi m Grad	m Gråd w/add'l Work	Min Max	Number of Wks
C.	Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable?						nformation Some Print the (Optional) Print the (course in the Bulletin course in the Time Schedu	ıle	
	Class Type(s)	Lec Section O	Lec Gradin	Lo	cation	Freq. of	I O II O IIIa O IIIb	1 111	Ha	If term 1st 2nd
	☐ Hec ☐ Sem ☑ A-E ☐ Sem ☐ Lab ☐ CR/NC ☑ Ann Arbor				Offering ■ Yearly □ Alter Years □ Even Years □ Odd Years					
	Dis O Dis U S/U Dislogical Station Ind Dislogical Station Camp Davis			Cognizant Faculty Perry Samson Title Professor Member:						
	☐ Other ☐ Curier: ☐ Fxtension				Grad Course:	Attach nomination if Cogniz	zant Faculty is not a regula	ar graduate faculty		
	Approval						Submitted By: Home De	ept. Cross listed Dept.	/	·
] Curriculu	um Comm.				Name, Signatur Home De	re & Department AOSS/Perry S	amson 5		
_	Faculty						ept(s). Environ/John h		· · · · · · · · · · · · · · · · · · ·	·
] Rackhai] Cross lis						.SNRE/David.	Allen	••••	
=	☐ Cross listed Unit 1 ☐ Cross listed Unit 2						.Geology/Jebor Biology/Debor	Blumah.Goldberg	•••••••	***************************************

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number 955

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Date 6/10/2002

Effective Winter 2003

A. CURRENT LISTING	B. REQUESTED LISTING				
Home Department Div # Course Number Atmospheric, Oceanic, & Space Sciences 241 172	Home Department Div # Course Number Program on the Environment 367 111				
Cross Listed Course Information 377 172 172 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174 174	Cross Listed Course Information 377 172 Geol Science 382 111 Sociology 482 111 SNRE 711 111 AOSS 241 172				
X Course Title Introduction to Global Change II	Course Title Introduction to Global Change II: Human Impacts				
Title	TITLE ABBRE- VIATION Time Sched Max = 19 Spaces Global Change II Transcript Max = 20 Spaces Glob Chng II				
Course Description An introduction to the evolution of life and the human species on earth, with focus on problems of global change produced by recer human advances in technology and institutions.	policy considerations for sustainability. Global Change II assumes no prior background and can be taken without prior enrollmentin Global Change I. Homework and laboratories use computer-based spatial analysis, group discussion and presentation.				
PROGRAM OUTCOMES:	PROGRAM OUTCOMES:				
Degree Requirements O Degree Requirement O Tech Elective O Core Course O Free Elective	Degree Requirements O Degree Requirement O Tech Elective O Core Course O Other				
Prerequisites © Enforced © Advised	Prerequisites None O Enforced O Advised				
Credit Restrictions	Credit Restrictions				
Level of Credit Undergrad only Rackham Grad Reckham Grad	Level of Credit Undergrad only				
Ugrad or Rickhm Grad Ugrad or Non-Rickhm Grad Ugrad or Non-Rickhm Grad of Wks	Non-Rckhm Grad				
C. Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable?	Printing Information Sometime Print the course in the Bulletin (Optional) Print the course in the Time Schedule				
Class Graded O Lec Grading Type(s)	Terms & □ I ■ II □ IIIa □ IIIb □ III				
⊠ Lab O Dis □ S/U □ Biological Station □ Dis O Ind □ P/F □ Camp Davis □ Ind O Other □ Y □ Extension	Cognizant Faculty Many Anne Carroll Title Professor Member:				
	Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty				
Approval Curriculum Comm.	Submitted By: Home Dept. Cross-listed Dept. Name, Signature & Department Learne Dept. AOSS/Perry Samson				
☐ Faculty ☐ Rackham ☐ Cross listed Unit 1 ☐ Cross listed Unit 2	Home Dept. AOSS/Perry Samson Cross-listed Dept(s). Environ/John Knott SNRE/David Allen. Geology/Joel Blum. Biology/Deborah Goldberg. Sc. C. C. C. S. Y				

Form Number

SUPPORTING STATEMENT	
The home department should move from AOSS to Environ so that scheduling is centralized, as well as other needed arrangements. UC crosslisting is no longer needed.	••••
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Are any special resources or facilities required for this course? ☐ Yes ⋈ No	
Detail the Special requirements	

College Curriculum Committee, 1420 Lurie Engineering Center Building



F	or	m	Number
9	5	5	

Date 6/10/2002

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Effective Winter 2003 Deletions - A & C completely

A. CURRENT LISTING			B. RI	EQUESTED LI	STING		
Home Department	Div#	Course Number	Home Dep			Div#	Course Number
Atmospheric, Oceanic, & Space Sciences	241	172	Program o	on the Environment		367	111
Cross Listed Course Information Geology Science Biology SNRE University Course	377 328 711 495	172 111 111 111	Cross Listed Geol Scier Sociology SNRE AOSS	Course Information		377 482 711 241	172 111 111 172
							•
Course Title			Course Title				
Introduction to Global Change II			Introduct	ion to Global Cha	nge II: Human Ir	mpacts	
TITLE Time Sched ABBRE- Max = 19 Spaces	······································	· • · · · · · · · · · · · · · · · · · ·	TITLE ABBRE-	Time Sched Max = 19 Spaces	Global Change	e .	
VIATION Transcript Max = 20 Spaces			VIATION	Transcript Max = 20 Spaces	Glob Chng II		
An introduction to the evolution of life and the human species on earth, with focus on problems of global change produced by recent human advances in technology and institutions.				study the impact nergy resources a nsiderations for s packground and c hange I. Homew nalysis, group dis	and biological div sustainability. G an be taken with ork and laborator	versity, and lobal Chang lout prior en ries use com	political and ge II assumes rollment in
PROGRAM OUTCOMES:			PROGI	RAM OUTCOM	IES:	·	
□a □b □c □d □e □f □g	□ h □	i □j □k	□ a □	b 🗌 c 🔲 d 🕻	e 🗆 f 🖂 g	□h □i	□j
Degree Requirements O Degree Requirement O Tech Ele O Core Course O Free Elective	ective		Degree Requirements O Degree Requirement O Core Course O Other Prerequisites None				
Prerequisites							
○ Enforced ○ Advised			0	O Enforced O Advise	d		
Credit Restrictions			Credit Restric				
☐ Undergrad only ☐ All Credit types ☐	Credit Hours Min Max	Contact Hrs/Wk Number of Wks	Level of Cre Undergrad o Rackham G Non-Rokhm Ugrad or Ro Ugrad or No	only ☐ All Cre Grad ☐ Rickhr n Grad	edit types n Grad w/add'l Work	Credit Hours Min Max 4 4	Contact Hrs/Wk 15 Number of Wks 15
Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable?	Printing In	formation ⊠ Print the c Optional) ⊠ Print the c	ourse in the Bulletin ourse in the Time Schedu	ule			
Class Type(s)		ation	Freq. of	I ■ II □ IIIa □ IIIb Yearly □ Alter Years □			alf term 1 1st 2nd
☐ Hec ☐ Sem ☐ A-E☐ Sem ☐ CR/NC☐ CR/N	Stab □ Dis □ Dis □ Dis □ Ind □ Other □ Other		Cognizant Faculty Mary Anne Carroll Title Professor Member: Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty				
□ Serii	D Bio □ Ca	ological Station Sological Station	Member:			***************************************	ssor
☐ Dis ☐ Ind ☐ P/F ☐ Ind ☐ Dis	D Bio □ Ca	ological Station Sological Station	Member: Grad Course: A	attach nomination if Cogniza	ant Faculty is not a regula	ar graduate faculty	ssor
☐ Dis O Ind ☐ P/F ☐ Ind O Other ☐ Y	D Bio □ Ca	ological Station Sological Station	Member: Grad Course: A St Name, Signature	uttach nomination if Cognizusbmitted By: Home Department	ant Faculty is not a regula	ar graduate faculty	ssor
Approval Curriculum Comm.	D Bio □ Ca	ological Station Sological Station	Member: Grad Course: A St Name, Signature Home Dep	uttach nomination if Cognization intended By: Home Department AOSS/Perry Sa	ant Faculty is not a regula ot. Cross-listed Dept.	ar graduate faculty	ssor
☐ Dis ☐ Ind ☐ P/F☐ ☐ Other ☐ Y	D Bio □ Ca	ological Station Sological Station	Member: Grad Course: A St Name, Signature Home Dep	uttach nomination if Cognizusbmitted By: Home Department	ant Faculty is not a regula ot. Cross-listed Dept.	ar graduate faculty	ssor

Form Number

The home department should move from AOSS to Environ so that schedu UC.crosslisting is no longer needed	

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Are any special resources or facilities required for this course?	□ Yes ⋈ No
Detail the Special requirements	
***************************************	***************************************

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number 955

Action Requested

New CourseModification of Existing CourseDeletion of Course Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Deletions - A & C completely

Date 6/10/2002

Effective Winter 2003

	A. CI	URRENT LIS	STING			B. RI	EQUESTED L	ISTING		
	Home Depa	ırtment		Div#	Course Number	Home Dep	artment		Div#	Course Number
Х	Atmosphe	eric, Oceanic, & Sp	pace Sciences	241	172	Program o	on the Environment		367	111
	Cross Listed Geology S Biology SNRE University			377 328 711 495	172 111 111 111	Cross Listed Geol Scier Sociology SNRE AOSS	Course Information nce		377 482 711 241	172 111 111 172
Х	Course Title	tion to Global C	Change II			Course Title Introduct	ion to Global Cha	ange II: Human II	mpacts	
	TITLE ABBRE- VIATION	Time Sched Max = 19 Spaces Transcript Max = 20 Spaces				TITLE ABBRE- VIATION	Time Sched Max = 19 Spaces Transcript	Global Change	e II	
х	7 0 8				Students water, er policy co no prior t Global C	nergy resources a insiderations for background and d hange I. Homew	on (Max = 50 words) It of human popul and biological div sustainability. G can be taken with rork and laborator scussion and pre	versity, and lobal Chang lout prior en ries use con	political and ge II assumes rollment in	
	PROGI	RAM OUTCO b c d	e of og		i	PROGI	RAM OUTCOM b	MES; de df dg	_h	□j
	Degree Req	O Core	ree Requirement O Tech e Course O Other e Elective			Degree Req	Uirements O Degree I O Core Co O Free Ele	Requirement O Tech Ele	ctive	
	Prerequisites					Prerequisites				
	Credit Restrict					Credit Restric		90		
	Level of Cre Undergrad Rackham (Non-Rckhn Ugrad or R	only □ Al Grad □ Ro n Grad	II Credit types ckhm Grad w/add'l Work	Credit Hours Min Max	Contact Hrs/Wk Number of Wks	Level of Cre Undergrad of Rackham G Non-Rckhr Ugrad or Ro	only 🔲 All Ci Grad 🗀 Rokh n Grad	redit types m Grad w/add'i Work	Credit Hours Min Max 4 4	Contact Hrs/Wk 15 Number of Wks 15
C.	ls this course Maximum	e repeatable? O Ye:	Maximum Times?			Printing Int	formation Print the Optional)	course in the Bulletin course in the Time Schedu	ule	I
	□ ⊠	Type(s) M Lec Section ○ Rec Location □ Rec □ Sem M A-E □ Sem ○ Lab □ CP/NC M Ann Arbor □ Lab □ CP/NC M Ann Arbor □ Side of the properties of the			Terms &					
		Ind Other	O Ind P/F O Other Y		mp Davis tension	Member:		y Anne Carroll zant Faculty is not a regula	Title Profes	New York
	Approval Curriculu	ım Comm.				Su Name, Signature Home Dep	& Department	ept. Cross-listed Dept.		
] Faculty] Rackhan] Cross lis] Cross lis					•	pt(s). Environ/John M .SNRE/David A .Geology/Joel E	Men		

College Curriculum Committee, 1420 Lurie Engineering Center Building



F	10	m	Number
9	5	5	

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Deletions - A & C completely

Date 6/10/2002
Effective Winter 2003

	A. CURRENT LISTING	B. REQUESTED LISTING				
_	Home Department Div # Course Number	Home Department Div # Course Number				
Х	Atmospheric, Oceanic, & Space Sciences 241 172	Program on the Environment 367 111				
	Cross Listed Course Information 377 172 Geology Science 328 111 SINRE 711 111 University Course 495 111	Cross Listed Course Information 377 172 Geol Science 377 172 Sociology 482 111 SNRE 711 111 AOSS 241 172				
Х	Course Title Introduction to Global Change II	Course Title Introduction to Global Change II: Human Impacts				
	TITLE	TITLE ABBRE- VIATION Transcript Transcript Global Change II Transcript Glob Chng II				
х	Course Description An introduction to the evolution of life and the human species on earth, with focus on problems of global change produced by recerbuman advances in technology and institutions.	Course Description for Official Publication (Max = 50 words) Students study the impact of human population growth on land, air				
	PROGRAM OUTCOMES: a b c d e f g h i j k Degree Requirements O Tech Elective Other Prerequisites	PROGRAM OUTCOMES: a b c d e f g h i j k Degree Requirements O Core Course O Free Elective Prerequisites None				
닏	○ Enforced ○ Advised	○ Enforced ⊙ Advised				
Ш	Credit Restrictions	Credit Restrictions				
	Level of Credit Undergrad only Rackham Grad Rockham Grad Ugrad or Non-Rickham Grad Ugrad or Non-Rickham Grad Ugrad or Non-Rickham Grad Ugrad or Non-Rickham Grad	Level of Credit S Undergrad only				
C.	Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable? ○ Yes ⊙ No Maximum Hours? Maximum Times? Can it be repeated in the same term? ○ Yes ○ No	Printing Information ⊠ Print the course in the Bulletin (Optional) ⊠ Print the course in the Time Schedule				
	Class Type(s)	Terms &				
ļ	□ Ind □ P/F □ Camp Davis □ Ind □ Other □ Y □ Extension	Cognizant Faculty Mary Anne Carroll Title Professor Member: Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty				
į	Approval	Submitted By: ■ Home Dept. □ Cross-listed Dept. 1				
	Curriculum Comm.	Name, Signature & Department Home Dept. AOSS/Perry Samson				
	Faculty ————————————————————————————————————	Cross-listed Dept(s). Environ/John Knott				
	Rackham Cross listed Unit 1 Cross listed Unit 2	.SNRE/David Allen .Geology/Loel Blum .Biology/Deborah Goldberg				

College Curriculum Committee, 1420 Lurie Engineering Center Building



F	or	m	Number
q	5	5	

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Deletions - A & C completely

Date 6/10/2002

Effective Winter 2003

A. C	URRENT LISTING		B. RE	QUESTED L	ISTING		
Home Depa	artment	Div # Course Number	Home Depa	artment		Div#	Course Number
Atmosphe	eric, Oceanic, & Space Sciences	241 172	Program o	n the Environment		367	111
Cross Listed	Course Information		Cross Listed	Course Information		•	
Geology S		377 172	Geol Scien			377	172
Biology	•	328 111	Sociology			482	111
SNRE		711 111	SNRE			711	111
University	/ Course	495 111	AOSS			241	172
X Course Title	etion to Global Change II		Course Title	ion to Global Ch	nange II: Human In	npacts	
	Time Sched		TITLE	Time Sched	Global Change		
TITLE ABBRE-	Max = 19 Spaces		ABBRE-	Max = 19 Spaces	Global Change		
VIATION	Transcript Max = 20 Spaces		VIATION	Transcript Max = 20 Spaces	Glob Chng II		
Course Des				iption for Official Publica			
earth, v	oduction to the evolution of life an vith focus on problems of global on advances in technology and inst	change produced by recent	water, el policy co no prior Global C	nergy resources onsiderations for background and change I. Home	ct of human popula and biological div sustainability. Gl can be taken with work and laborator discussion and pre	ersity, and pobal Chang out prior endies use com	political and e II assume rollment in
□ a [GRAM OUTCOMES: b	n Elective	□ a □		e Requirement O Tech Ele	h i	□j □k
Prerequisi			Prerequisites				
Credit Rest	rictions		Credit Restr	ctions			
Level of C	redit	Credit Hours Contact	Level of C		· · · · · · · · · · · · · · · · · · ·	Credit Hours	Contact
Undergr	ad only	Hrs/Wk	Undergrad □ Rackham	lonly ☐ All Grad ☐ Ro	Credit types khm Grad w/add'l Work	Min Max	Contact Hrs/Wk 15
☐ Rackhai	khm Grad	Number	□ Non-Rckh	m Grad	Gidd maddi ffoik		
□ Ugrad o	r Rokhm Grad r Non-Rokhm Grad	of Wks	Ugrad or Ugrad or	Rickhm Grad Non-Rickhm Grad		4 4	Number of Wks15
Is this con	Repeatability (Indi Research, Dir. Study, Dissertation urse repeatable? O Yes O No num Hours? Maximum Times?	on: 	Printing I	nformation ⊠ Print t (Optional) ⊠ Print t	ne course in the Bulletin ne course in the Time Sched	ule	
Can it	be repeated in the same term? O Yes O No	······································					
.,,,,,,	Graded O Lec Grad Lec Section O Rec Rec O Sem Ø A-E Sem O Lab □ CR	Location	Freq. of	3 ! ■ !! □ !!!a □ ! ■ Yearly □ Alter Year:	lib □ III s □ Even Years □ Odd N		alf term 1 1st 2nd
1		☐ Biological Station	Cognizant Fa Member:	culty	Mary Anne Carroll	Title Profe	essor
	□ Other	_ 2.101001	Grad Course	Attach nomination if Co	gnizant Faculty is not a regul	ar graduate facult	······································
			1				,
				Submitted Bur Home	Dept Cross-listed Dep	1	,
Approval	ulum Comm.		Name, Signatu	re & Department	Dept. Cross-listed Dep	1	-
Approval	ulum Comm.		Name, Signatu Home D	re & Department ept. <u>AOSS/Perry</u>	Samson 3	1_	-
Approval Currice	ulum Comm.		Name, Signatu	pre & Department Pept. AOSS/Perry Dept(s). Environ/Joh	n Knott	1	
Approval Currice Facult Rackh	ulum Comm.		Name, Signatu Home D	re & Department ept. AOSS/Perry Dept(s) Environ/Joh SNRE/Davi	Samson 3	1	

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number 981

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Deletions - A & C completely

Date 10/8/2002 Effective Winter 2003

	A. CURRENT LISTING	B. REQUESTED LISTING
	Home Department Div # Course Number	Home Department Div # Course Number Chemical Engineering 245 330
	Cross Listed Course Information	Cross Listed Course Information
Х	Course Title	Course Title
	Thermodynamics Time Sched	Chemical and Engineering Thermodynamics
	ABBRE- Max = 19 Spaces I nermodynamics	TITLE Time Sched Chem & Eng Thermo
	VIATION Transcript Max = 20 Spaces Thermodynamics	VIATION Transcript Chem & Eng Thermo
	Course Description	Course Description for Official Publication (Max = 50 words) Development of fundamental thermodynamic property relations and complete energy and entropy balances. Analysis of heat pumps and engines and use of combined energy-entropy balances in flow devices. Calculation and application of total and partial properties in physical and chemical equilibria. Prediction and correlation of physical/chemical properties of various states and aggregates.
	PROGRAM OUTCOMES:	PROGRAM OUTCOMES:
	Degree Requirements Degree Requirements Degree Requirement Degree Requirement	
	O Core Course O Other Prerequisites	O Core Course O Other O Free Elective
닉	○ Enforced ○ Advised	Prerequisites © Enforced © Advised Charn & 230 is Ir Rady on)
Ш	Credit Restrictions	Credit Restrictions
	Level of Credit Undergrad only Rackham Grad Rockhm Grad w/add'l Work Ugrad or Rockhm Grad Ugrad or Non-Rickhm Grad Ugrad or Non-Rickhm Grad	Level of Credit Undergrad only All Credit types Credit Hours Non-Rokhm Grad Rokhm Grad Wadd'l Work Ugrad or Rokhm Grad Ugrad or Non-Rokhm Grad Ugrad or Non-Rokhm Grad Ugrad or Non-Rokhm Grad Ugrad or Non-Rokhm Grad
C.	Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable? O Yes O No Maximum Hours? Maximum Times? Can it be repeated in the same term? O Yes O No	Printing Information (Optional) ⊠ Print the course in the Bulletin □ Print the course in the Time Schedule
	Class Type(s)	Terms & Freq. of Offering Yearly Alter Years Even Years Odd Years Cognizant Faculty Robert Ziff Title Professor Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty
_	Approval	Submitted By: ■ Home Dept. □ Cross-listed Dept.
	Curriculum Comm.	Name, Signature & Department Home Dept. Annald Larson, Chairman
	Paculty Rackham Cross listed Unit 1	Cross-listed Dept(s).

ross listed Unit 2	
	Causa Nivershau
	Form Number 981
	301
SUPPORTING STATEMENT	
The revised title better reflects the course content.	
Are any special resources or facilities required for this course? □ Yes ⋈ No	
Detail the Special requirements	

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number

1002

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Deletions - A & C completely

Date 11/15/2002 Effective Winter 2003

	A. CI	URRENT LIST	ring			, В. R	EQUESTED LIS	STING		
	Home Depa			Div#	Course Number	Home Dep	···		Div#	Course Number
	Chemical	Engineering		245	583					
	Materials S	Course Information Science & Engineer Il Engineering	ing		583 583	Cross Listed	Course Information			
	Course Title Biocomp	atibililty of Mate	rials			Course Title				
	TITLE ABBRE-	Time Sched Max = 19 Spaces	Biocompat of	Mat		TITLE ABBRE-	Time Sched Max = 19 Spaces			
	VIATION	Transcript Max = 20 Spaces	Biocomp Mat			VIATION	Transcript Max = 20 Spaces			
	materials addition, various s	ription Irse describes the s, and the biolog specifications vertengths, and we and future direct	pic/pathologic pro which govern bio reaknesses of a	ocesses invocempatibiling	olved. In ty testing,	Course Desc	ription for Official Publication	(Max = 50 words)		
	PROG	RAM OUTCO	MES:		*	PROG	RAM OUTCOME	S: 1	·	<u></u>
	□ a □	b 🗆 c 🗆 d	□e □f □g		i □i □k	□а□		e □f □g	□h □i	□i□k
	Degree Req	uirements O Degre O Core O O Free B	e Requirement O Tech Course O Other	Elective		Degree Re	quirements O Degree Rec	quirement O Tech Ele		
	Prerequisites	Undergraduate course	in biology and/or physiolo	ogy; undergraduate	course in	Prerequisites	O Free Electi C Enforced C Advised	ve		
	Credit Restrict	tions				Credit Restri	ctions			
	Level of Cre Undergrad Rackham (Non-Rckhn Ugrad or R	only	Credit types hm Grad w/add'l Work	Credit Hours Min Max	Contact Hrs/Wk Number of Wks	Level of Cr. Undergrad Rackham o Non-Rckhi Ugrad or P Ugrad or N	only ☐ All Cred Grad ☐ Rckhm n Grad	lit types Grad w/add'l Work	Credit Hours Min Max	Contact Hrs/Wk Number of Wks
C.	Is this course Maximum	peatability (Indi Researche repeatable? O Yes n Hours? Ma repeated in the same ter	⊙ No ximum Times?			Printing In	formation	urse in the Bulletin urse in the Time Sched	lule	
	Class Type(s)	LEC Section	O Lec Gradin		antin-	Terms & C	l I II I IIIa I IIIb I	3 ())	Ha	alf term 1st
		Rec Sem	OSem ⊠A-E OLab □CR/No		ation n Arbor		Yearly Alter Years	Even Years 🗖 Odd \	/ears	□ 2nd
		Lao Dis	O Dis □ S/U O Ind □ P/F O Other □ Y	□ Bio □ Ca	Plogical Station mp Davis tension	Cognizant Fac Member:	ulty Ronald	d G. Larson	Title Chair	
						Grad Course:	Attach nomination if Cognizan	nt Faculty is not a requi	ar graduate faculty	
	Approval							□ Cross-listed Dept		
] Curriculu	m Comm.				Name, Signature	e & Department	() A	Sola-	_
] Faculty] Rackhan] Cross lis	-				Home De Cross-listed De		Ma Ma	John Hallora	on, ChE Chair an, MSE Chair ell, BME Chair

J Onit 2	
	Form Number
RTING STATEMENT	1002
e is no longer offered	
	······
	·
special resources or facilities required for this course?	
e Special requirements	

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form	Number
1004	

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

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

Date 11/21/2002

	Deletions - A & C complet	ely Effective Fair 2005
	A. CURRENT LISTING	B. REQUESTED LISTING
_	Home Department Div # Course Number	Home Department Div # Course Number
	EECS 252 401	EECS 252 401
	Cross Listed Course Information	Cross Listed Course Information
	Course Title	Course Title
•	Probabilistic Methods in Engineering	Probabilistic Methods in Engineering
	TITLE Time Sched Prob Methods Engr	TITLE Time Sched Prob Methods Engr
	ABBRE- Max = 19 Spaces	ABBRE-
	VIATION Transcript Max = 20 Spaces Prob Methods Engr	VIATION Transcript Max = 20 Spaces Prob Methods Engr
\neg	Course Description	Course Description for Official Publication (Max = 50 words)
	Basic concepts of probability theory. Random variables: discrete, continuous and conditional probability distributions; averages; independence. Introduction to discrete and continuous random processes, wide sense stationarity, correlation, spectral density.	Basic concepts of probability theory. Random variables: discrete, continuous and conditional probability distributions; averages; independence. Introduction to discrete and continuous random processes; wide sense stationarity, correlation, spectral density.
	PROGRAM OUTCOMES: ☑a ☑ b ☐ c ☐ d ☐ e ☐ f ☐ g ☐ h ☐ i ☐ j ☑ k	PROGRAM OUTCOMES: ☑ a ☑ b ☐ c ☐ d ☐ e ☐ f ☐ q ☐ h ☐ i ☐ i ☒ k
	Degree Requirements O Degree Requirement O Core Course O Tech Elective O Other	Degree Requirements Degree Requirement O Core Course O Tech Elective O Other
Х	Prerequisites EECS 306 or EECS 212/316 and Junior standing, or Graduate standing • Enforced () Advised	Prerequisites EECS 306 or 212/316 or graduate standing. Students who are EE, CE, or CS majors may © Enforced
Х	Credit credit for only one of EECS 401 and EECS 501 Restrictions	Credit Students who are EE, CE, or CS majors may receive credit for at most one of EECS 401 or Restrictions Math/Stat 425 or IOE/Stat 265 for transfer credits considered equivalent to Math 425
	Level of Credit Credit Hours Contact	Level of Credit
	□ Undergrad only □ Ugrad or Non-Rickhm Grad □ Rackham Grad □ Rickhm Grad □ Rickhm Grad □ Rickhm Grad □ Ugrad or Non-Rickhm	Undergrad only Ugrad or Non-Rckhm Grad Rackham Grad Non-Rckhm Gra
C.	Repeatability (Indi Research, Dir. Study, Dissertation: Is this course repeatable?	Printing Information (Optional)
\neg	Class Graded • Lec Grading	Terms & ■ I □ II □ IIIa □ IIIb □ III Half term □ 1st
	Type(s) ⊠ Lec Section ○ Rec Location □ Rec ○ Sem ☒ A-E □ Sem ☐ Ann Arbor	Freq. of Offering Yearly Alter Years Even Years Odd Years
	☐ Lab ☐ Dis ☐ S/U ☐ Biological Station ☐ Dis ☐ Ind ☐ P/F ☐ Camp Davis ☐ Ind ☐ Other ☐ Y ☐ Extension	Cognizant Faculty W.E. Stark Title Professor Member: D. Teneketzis Professor D. J. Anderson Professor Grad Course: Attach nomination if Cognizant Faculty is not a regular graduate faculty
į	Approval	
	Curriculum Comm.	Submitted By. Home Dept. Cross-listed Dept. Name, Signature & Department
	Faculty Rackham Cross listed Unit 1 Cross listed Unit 2	Home Dept. EECS Jeff Fessler 11/27/02 Signature on File Cross-listed Dept(s).

Eorm	Nin	mber
- 1 71 1 1 1	1411	11111

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SUPPORTING STATEMENT

There is very substantial overlap in the content of these 3 courses. (In fact EECS 401 and Math 425 sometimes even use the same
albeit with different emphasis.). Students who take more than one of these, no matter what their major, are exploiting a Joophole that should be eliminated. We feel that it is best to alert students to this restriction in the bulletin description for the course rather than hiding it in the numerous footnotes of the degree requirements.
It is the view of the EECS faculty that the credit restriction should apply to ALL students, not just to majors with EECS, and we would gladly
accept an amendment to strike the "who are EE, CE, or CS majors" clause.
Are any special resources or facilities required for this course?
Detail the Special requirements

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number 1006

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Deletions - A & C completely

Date 11/27/2002

Effective Winter 2003

Home Depa	rtment		Div#	Course Number	Home Dep	ertment		Div#	Course Numbe
EECS			252	425	EECS			252	425
Cross Listed	Course Information				Cross Listed	Course Information			
Course Title	ed Microsystems	s Laboratory			Course Title	d Microsystems	l aboratory		
TITLE	Time Sched	Integ Microsy	s I ah		TITLE	Time Sched	Integ Microsys	e I ah	
ABBRE- VIATION	Max = 19 Spaces Transcript	Integ Microsy			ABBRE- VIATION	Max = 19 Spaces Transcript	Integ Microsys		
Course Des	Max = 20 Spaces		<u> </u>			Max = 20 Spaces iption for Official Publication		Lab	
pattern Packagi	transfer, oxidatio	and MOS chip fon, ion implantati hallenges. Stude	ion and me	etallization.	pattern t Packagii	circuits. MEMS a ransfer, oxidation ng and testing ch iplinary teams.	ı, ion implantati	on and met	
	RAM OUTCO					RAM OUTCOM			
	<u> </u>		h	i □j ⊠k	PROG ⊠a ⊠		MES:] ⊠e ⊠f ⊠g		□j⊠k
⊠a ⊠	b 🛭 c 🖾 d	e Requirement O Tech I		i □j ⊠k	⊠a ⊠	b 🛭 c 🖾 d 🖟	Requirement O Tech El ourse O Other		□j⊠k
⊠ a ⊠ Degree Re	b 🛭 c 🖾 d	e Requirement O Tech I O Other Elective Or permission of instructor		i □j ⊠k	⊠a ⊠	b C C Degree O Core Co O Free Ele PECS 311 or EECS 312	Requirement On Tech Elective Tech Elective Tech Elective Tech Elective Tech Elective	lective	□j⊠k
⊠ a ⊠ Degree Re	quirements O Degraments O Core O Free SECS 311 and 320 CORE O Enforced O Advise	e Requirement O Tech I O Other Elective Or permission of instructor		i □j⊠k	⊠ a ⊠ Degree Re	b C D d Degree Co Cree Cc Free Ele	Requirement On Tech Elective Tech Elective Tech Elective Tech Elective Tech Elective	lective	□j⊠k
Degree Red Prerequisite Credit Restri Level of Cr Undergrad Rackham S Non-Rick S Ugrad or	duirements O Degra O Core O Free DES EECS 311 and 320 of DEnforced O Advise Ctions Ctions All Grad Grad Grad Grad	e Requirement O Tech I O Other Elective Or permission of instructor		i	Degree Red Prerequisites Credit Resurt Level of Cr. Undergrad Rackham Non-Rickh	b C Degree O Core Co O Free Eic EECS 311 or EECS 312 Enforced Advis	Requirement On Tech Elective Tech Elective Tech Elective Tech Elective Tech Elective	lective	Contact Hrs/Wk
Degree Rei Prerequisite Prerequisite Credit Restri Level of Cr Undergrae Rackham Non-Rick Ugrad or Ugrad or Is this cour	quirements O Degraments O Core O Free Description of Core Descripti	De Requirement O Tech I Course O Other Elective O Other Elective or permission of instructor and Credit types khm Grad w/add'l Work ch, Dir. Study, Dissertation O No aximum Times?	Credit Hours Min Max 4 4	Contact Hrs/Wk 4 Number	Degree Red Prerequisites Credit Restrict Level of Credit Restrict Rackham Non-Rickh Ugrad or N Printing In	b C D d C puirements O Degree O Core Cc O Free Ele EECS 311 or EECS 312 Enforced Advisations citions dit Only Grad Rickrift	Requirement On Tech Eluses octive On Tech Eluses or EECS 414 or graduated of the Grad w/add'l Work	e standing Credit Hours Min Max 4 4	Contact Hrs/Wk
Degree Rei Prerequisite Prerequisite Credit Restri Level of Cr Undergrae Rackham Non-Rick* Ugrad or Ugrad or Is this cour Maximu Can it b Class Type(s)	to b C C d dquirements O Degram O Core O Free os EECS 311 and 320 c C Enforced © Advise ctions edit only All Grad Rockinn Grad Rockinn Grad Rockinn Grad Non-Rockinn Grad Repeatability (Indi Research Se repeatable? Yes am Hours? Me repeated in the same to G Lec Graded Section Sem 3 Leb	Credit types khm Grad w/add'l Work ch, Dir. Study, Dissertation addinum Times? ch, Common C	Credit Hours Min Max 4 4 :	Contact Hrs/Wk 4 Number of Wks 14	Prerequisites Credit Restrict Level of Cr Undergram Non-Rich Ugrad or N Printing In	b C d gree Core Cc	Requirement O Tech El O Other extrement or EECS 414 or graduate ed redit types arm Grad w/add'l Work	e standing Credit Hours Min Max 4 4	Contact Hrs/Wk
Degree Rei Prerequisite Prerequisite Credit Restri Level of Cr Undergrae Rackham Non-Rick Ugrad or Ugrad or Rakham Stripe our Maximu Can it b Ctass Type(s)	quirements O Degraments O Degra	Lec Gradin Per Requirement O Tech if O Other Elective Course O Other Elective O Other Elective Credit types changed was a	Credit Hours Min Max 4 4 CC CC CC CC CC CC CC CC CC	Contact Hrs/Wk 4 Number of Wks 14	Prerequisites Credit Restrict Level of Cr Undergram Non-Rich Ugrad or N Printing In	b C d d cultiments O Degree Co O Free Elections of Core Core Core Core Elections of Core Core Core Core Core Core Core Core	Requirement O Tech El O Other extrement or EECS 414 or graduate ed redit types arm Grad w/add'l Work	e standing Credit Hours Min Max 4 4 dule	Contact Hrs/Wk Number of Wks
Degree Rei Prerequisite Credit Restri Level of Cr Undergrad Rackham Non-Rick Ugrad or Ugrad or Is this cour Maximu Can it b	to b C C d dquirements O Degraments O Core O Free os EECS 311 and 320 c o Enforced O Advise ctions edit d only All Grad Rockm Grad Rockm Grad Rockm Grad Non-Rickm Grad Non-Rickm Grad I Rockm Grad I Rockm Grad I Rockm Grad Rockm Gr	De Requirement O Tech fourse Elective O Other Elective or permission of instructor and O Tech fourse Elective or permission of instructor and O Tech fourse Elective O Other Elective or permission of instructor and O Other Elective or or permission of instructor and O Other Elective or other Elect	Credit Hours Min Max 4 4 CC CC CC CC CC CC CC CC CC	Contact Hrs/Wk 4 Number of Wks 14 Docation Ann Arbor iological Station camp Davis	Prerequisites Credit Resign Level of Cr Undergrad Non-Richam Non-Richa Ugrad or N Printing In Terms & E Freq. of Offering Cognizant Fac Member:	b C d d cultiments O Degree Co O Free Elections of Core Core Core Core Elections of Core Core Core Core Core Core Core Core	Requirement O Tech El O Other Sective O Other Section O Other	e standing Credit Hours Min Max 4 4 dule Years Title Prof	Contact Hrs/Wk Number of Wks Half term 1st 2nd
Degree Rei Prerequisite Prerequisite Credit Restri Level of Cr Hackman Non-Rick Undergrad Son-Rick Ungrad or Ugrad or Is this cour Maximu Can it b Class Type(s) Approval	to b C C d dquirements O Degraments O Core O Free os EECS 311 and 320 c o Enforced O Advise ctions edit d only All Grad Rockm Grad Rockm Grad Rockm Grad Non-Rickm Grad Non-Rickm Grad I Rockm Grad I Rockm Grad I Rockm Grad Rockm Gr	De Requirement O Tech fourse Elective O Other Elective or permission of instructor and O Tech fourse Elective or permission of instructor and O Tech fourse Elective O Other Elective or permission of instructor and O Other Elective or or permission of instructor and O Other Elective or other Elect	Credit Hours Min Max 4 4 CC CC CC CC CC CC CC CC CC	Contact Hrs/Wk 4 Number of Wks 14 Docation Ann Arbor iological Station camp Davis	Prerequisites Credit Restrict Level of Cr. Moral Rackham Non-Rich Ugrad or N Printing In Terms & Freq. of Offering Cognizant Fackham Member: Grad Course:	b C d d complete department of Degree Electrons Littons Littons	Requirement Of Tech El Nurse octive Of Other octive or EECS 414 or graduate od Other octive or EECS 414 or graduate of Other octive or EECS 414 or graduate or	e standing Credit Hours Min Max 4 4 dule Years Title Prof Prof Jular graduate facul ot.	Contact Hrs/Wk Number of Wks Half term 1st 2nd

Form	Number
1006	

S	u	Р	P	O	R	TI	N	IG	SI	ΓΔ.	TF	M	ΙF	N٦	Г

The intent is for the class to be accessible via two routes: 1) devices/circuits (311/312), or 2) MEMS (414). Students work in interdisciplinary teams combining students with device expertise with students with MEMS expertise.
The EECS 320 prerequisite is no longer needed to be listed explicitly since 320 is now a prerequisite for 311 and 312.
······································

Are any special resources or facilities required for this course?
- 10
Detail the Special requirements

College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number 993

Action Requested

New CourseModification of Existing CourseDeletion of Course

Complete the following sections:

New Courses - B & C completely

Modifications - A modified information, B & C completely

Deletions - A & C completely

Date 10/23/2002

Effective Winter 2003

A. CI	JRRENT LISTING		В. R	EQUESTED L	ISTING		
Home Depar	trnent	Div# Course Number	Home Dep	artment	· .	Div #	Course Number 546
Cross Listed	Course Information		Cross Listed Applied Pl	Course Information		320	546
Course Title			Course Title				<u> </u>
TITLE	Time Sched Max = 19 Spaces		TITLE	Time Sched Max = 19 Spaces	Ultrafast Option	:s	
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Is this cours Maximur	epeatability (Indi Research, Dir. Study, Disse se repeatable? O Yes O No in Hours? Maximum Times? e repeated in the same term? O Yes O N	·		nformation Print the (Optional)	e course in the Bulletin e course in the Tirne Sched	lule	
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Approval Curriculu Faculty Rackhai Cross lis	 m		 {	Submitted By: Home re & Department EECS Jeff Fo	Dept. Cross-listed Dept		002-10-

ln recent pa	TING STATEMENT ust, this course has only been offered at it is not quaranteed to be available.	ed every other year, so it seems ble every year. Sometimes we m	preferable to list it that way in the budy be able to offer it two years in a ro	lletin so student
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	ecial resources or facilities requ	ired for this course?	∕es ⊠ No	

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College Curriculum Committee, 1420 Lurie Engineering Center Building



Form	Number
1000	

Action Requested

O 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

Date 10/30/2002 Effective Winter 2003

				Deletions -	A & C complete	ŧıy .				
	A. CL	JRRENT LISTIN	IG			B. R	QUESTED LIST	ING		
\neg	Home Depa	rtment and Operations E	ngineering	Div # 272	Course Number	Home Dep	artment		Div#	Course Number
	Cross Listed	Course Information		275	634	Cross Listed	Course Information			
	Course Title	CHINE SYSTE	 MS			Course Title	<u> </u>			
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	ABBRE- VIATION	Transcript Max = 20 Spaces	MAN-MACH	IINE SYSTEM	1S	- ABBRE- VIATION	Transcript Max = 20 Spaces			.: , , , , , , , , , , , , , , , , , , ,
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C.	Is this cours Maximus	se repeatable? O Yes	faximum Times?	n: 		Printing I	nformation Print the (Optional) Print the	e course in the Bulletin e course in the Time Sched	dule	
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Form Number

SUPPORTING STATEMENT
This course has not been offered since Winter 1994. There are no plans to offer this course in the future.

Are any special resources or facilities required for this course?
Detail the Special requirements
