UNIVERSITY CURRICULUM COMMITTEE January 16, 2007 3:00 p.m. — University Union, Havasupai A/B

<u>Agenda</u>

OLD BUSINESS	
. MINUTES OF THE November 28, 2006 MEETING	
NEW BUSINESS	
. CONSENT ITEMS	
A. COLLEGE OF SOCIAL AND BEHAVIORAL SCIE	ENCES
1. EMF 251 - Electronic Media Staff Workshop 1	Course Change - grading option, requisites, description
2. EMF 252 – Electronic Media Mgmt Workshop 2	Course Change- grading option, requisites
3. JLS 208 – Fieldwork Experience	Course Change - credits
4. JLS 230 – Humor Writing	Course Change - offering status
5. POS 159 – Nature and Politics	Course Deletion
6. POS 428 – Topics in Public Administration	Course Change - prerequisite
7. VC 329 - Typographics	Course Change – prerequisite
8. VC 333 – Graphic Design	Course Change - prerequisite
R CONSODEHIM OF PROPERTON A CONSO	
B. CONSORTIUM OF PROFESSIONAL SCHOOLS 1. HS 305W, 307, 333, 490	
1. 113 303 44, 307, 333, 490	Course Change – prerequisites
C. Diversity -	POD 270 C T/O D4 A D4
of Divisity	FOR 270 for US Ethnic Diversity- Fall '06
D. COLLEGE OF ENGINEERING AND NATURAL SO	TENCEC
1. EGR 286 – Engineering Design: The Process	
2. CENE 180 - Computer Aided Drafting	Course Change – description, requisites Course Change - description
3. CENE 251 – Applied Mechanics Statics	
4. CENE 270 – Plane Surveying	Course Change - description, requisites Course Change - title, description
5. CENE 280 – Environ. Engineering Fundamentals	Course Change – corequisite
6. CENE 330 - Air Quality Engineering	Course Change – description
7. CENE 332 – Solid and Hazardous Waste Mgmt.	Course Change - description, prerequisite
8. CENE 333 – Applied Hydraulics	Course Change - description, prerequisite
9. CENE 333L – Applied Hydraulics Lab	Course Change - description Course Change - description
10. CENE 376 – Structural Analysis I	Course Change - description
11. CENE 386W - Engineering Design: The Methods	Course Change – description
12. CENE 418 – Highway Engineering	Course Change - description
13. CENE 420 – Traffic Study and Signal	Course Change – description, prerequisite
14. CENE 430 - Air Pollution Controls Design	Course Change - prerequisite
15. CENE 433 - Hydrology and Flood Control	Course Change- description, prerequisite
16. CENE 434 -Water & Waste-Water Units Design	Course Change – description
17. CENE 436 – Structural Steel Design	Course Change - description
18. CENE 437 – Wood Building Design	Course Change – description
19. CENE 438 - Reinforced Concrete Design	Course Change – description
20. CENE 476 – Egr Design Porc Lab	Course Change - title, description
21. CENE 486C - Engineering Design	Course Change – prerequisite
22. STA 473C - Intro to Mathematical Statistics I	Course Change - prerequisite

II. ACTION ITEMS	
A. COLLEGE OF SOCIAL AND BEHAVIORAL SCIE	ENCES
1. Minor in Native American Studies	Plan Change
2. BS Applied Indigenous Studies	Plan Change
3. BA Applied Indigenous Studies	Plan Change
4. BSJED	Plan Deletion
5. PRM 221 – Intro to Orienteering	New Course
6. PRM 222-Search and Rescue Technician II& III	New Course
7. PRM 223 – Intro to Technical Rescue	New Course
8. PRM 224 – Intro to Tracking	New Course
9. PRM 225 - Avalanche Safety Level I	New Course
10. PRM 432 - Intro to Multi-day River Expedition	New Course
Leadership	
B. COLLEGE OF ENGINEERING AND NATURAL SO	CIENCES
1. BS Biology	Plan Change
2. BS Exercise Science	Plan Change
3. CENE 150L – Intro to Environ. Engin. Lab	New Course
4. CENE 383L - Geotechnical Engineering 1 Lab	New Course
5. CENE 383 – Soil Mechanics and Foundations	Course Change - title, description, corequisite
6. CENE 457 – Masonry Design	New Course
7. STA 275 – Statistical Analysis	New Course
8. STA 477 – Time Series Analysis	New Course
9. STA 270 – Applied Statistics	Course Change - description
10. STA 371 – Intermediate Statistics	Course Change - prerequisite
11. STA 471 – Regression Analysis	Course Change- prerequisite
12. STA 472 – Nonparametric Statistics	Course Change- prerequisite
13. BSEd Mathematics Secondary	Plan Change
14. BS Mathematics Extended	Plan Change
15. Minor in Mathematics, Secondary Education	Plan Change
16. Minor in Statistics	Plan Change
17. Minor in Mathematics	Plan Change
III. DISCUSSION	
A. Curriculum Review of University Course	
Lines	

UNIVERSITY CURRICULUM COMMITTEE January 16, 2007 MINUTES

OLD BUSINESS

I. MINUTES OF THE November 28, 2006 MEETING – approved.

Members Present: J.Allen, M. Glass, J. Hagood, D. Hardy-Short, E. Hill, D. Koerner, K. Kozak, C. Lee, D. Li.,

B. Maris, C. Medina, E. Norgard, P. Pollak, D. Raymond, D. Ruwe, G. Tallman, B. Urdang, B. Willis

Members Absent: C. Hammersley

NEW BUSINESS	
I. CONSENT ITEMS	
A COLLEGE OF GOOTAL AND DEVIATION AS COM-	NODE 1
A. COLLEGE OF SOCIAL AND BEHAVIORAL SCIE	
1. EMF 251 – Electronic Media Staff Workshop 1	Course Change – grading option, requisites, description
2. EMF 252 – Electronic Media Mgmt Workshop 2	Course Change – grading option, requisites
3. JLS 208 – Fieldwork Experience	Course Change – credits
4. JLS 230 – Humor Writing	Course Change – offering status
5. POS 159 – Nature and Politics	Course Deletion
6. POS 428 – Topics in Public Administration	Course Change – prerequisite
7. VC 329 – Typographics	Course Change – prerequisite
8. VC 333 – Graphic Design	Course Change - prerequisite
B. CONSORTIUM OF PROFESSIONAL SCHOOLS -	approved as presented
1. HS 205W, 307, 333, 490	Course Change - prerequisites
C. Diversity - FOR 270 for US Ethnic Diversity - Fall '06	Approved for spring 2007.
, , , , , , , , , , , , , , , , , , , ,	1.1
D. COLLEGE OF ENGINEERING AND NATURAL SO	CIENCES - approved as presented
1. EGR 286 – Engineering Design: The Process	Course Change – description, requisites
2. CENE 180 – Computer Aided Drafting	Course Change – description
3. CENE 251 – Applied Mechanics Statics	Course Change – description, requisites
4. CENE 270 – Plane Surveying	Course Change - title, description
5. CENE 280 - Environ. Engineering Fundamentals	Course Change – corequisite
6. CENE 330 – Air Quality Engineering	Course Change – description
7. CENE 332 - Solid and Hazardous Waste Mgmt.	Course Change – description, prerequisite
8. CENE 333 – Applied Hydraulics	Course Change – description, prerequisite
9. CENE 333L – Applied Hydraulics Lab	Course Change – description
10. CENE 376 – Structural Analysis I	Course Change - description
11. CENE 386W - Engineering Design: The	Course Change – description
Methods	
12. CENE 418 – Highway Engineering	Course Change – description
13. CENE 420 – Traffic Study and Signal	Course Change – description, prerequisite
14. CENE 430 – Air Pollution Controls Design	Course Change – prerequisite
15. CENE 433 – Hydrology and Flood Control	Course Change – description, prerequisite
16. CENE 434 – Water & Waste – Water Unites	Course Change – description
Design	· · · · · · · · · · · · · · · · · · ·
17. CENE 436 – Structural Steel Design	Course Change – description
18. CENE 437 – Wood Building Design	Course Change –description
19. CENE 438 – Reinforced Concrete Design	Course Change – description
20. CENE 476 – Egr Design Porc Lab	Course Change – title, description
21. CENE 486C – Engineering Design	Course Change – prerequisite
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22. STA 473C – Intro to Mathematical Statistics I	Course Change - prerequisite
II. ACTION ITEMS	
A. COLLEGE OF SOCIAL AND BEHAVIORAL SC due to no department representation at the meeting.	IENCES – items 1-4 approved as presented, items 5-10 tabled
1. Minor in Native American Studies	Plan Change
2. BS Applied Indigenous Studies	Plan Change

Plan Change

4. BSJED	Plan Deletion
5. PRM 221 – Intro to Orienteering	New Course
6. PRM 222 – Search and Rescue Technician II &	New Course
Ш	
7. PRM 223 – Intro to Technical Rescue	New Course
8. PRM 224 – Intro to Tracking	New Course

3. BA Applied Indigenous Studies

9. PRM 225 – Avalanche Safety Level I New Course
10. PRM 432 – Intro to Multi-Day River Expedition New Course
Leadership

1. BS Biology	Plan Change
2. BS Exercise Science	Plan Change
3. CENE 150L – Intro to Environ. Engin. Lab	New Course
4. CENE 383L – Geotechnical Engineering 1 Lab	New Course
5. CENE 383 - Soil Mechanics and Foundations	Course Change - title, description, corequisite
6. CENE 457 – Masonry Design	New Course
7. STA 275 – Statistical Analysis	New Course
8. STA 477 – Time Series Analysis	New Course
9. STA 270 – Applied Statistics	Course Change – description
10. STA 371 – Intermediate Statistics	Course Change – prerequisite
11. STA 471 – Regression Analysis	Course Change – prerequisite
12. STA 472 – Nonparametric Statistics	Course Change – prerequisite
13. BSEd Mathematics, Secondary Education	Plan Change
14. BS Mathematics Extended	Plan Change
15. Minor in Mathematics, Secondary Education	Plan Change
16. Minor in Statistics	Plan Change
17. Minor in Mathematics	Plan Change

III. DISCUSSION

A. Curriculum Review of University Course Lines

OTHER – The committee approved the following policy: "The Chair, Associate Dean, or Designee of a department, who is not on a member on the UCC, must represent curricular materials at the UCC meetings." UCC members can help support and answer questions, but cannot be the sole representative for the materials.

1. Is this a	Liberal Studies or Diversity Course	? Liberal Stud	ties 🗌 🏻 I	Diversity	Both
No 2. Course c (ex. Spr	hange effective beginning of what ting 2008, Summer 2008) See effect	term and year? tive dates schedule.	SP 07		
3. College	SBS		4. Academic	Unit School o	f Communication
5. Current c	ourse subject/catalog number	EMF 251			
Electron	atalog title, course description, and ic Media Staff Workshop (1) Profe a staff member in one of the departup to 6 hrs. Letter grade only. May EM 223.	ssional hands-on proments of student me	oduction, post p dia operations o	roduction, writing f UTV or KJACE	g or sales experience in \(\text{radio.} \) 1 hr. lecture, 3
7. Is course	currently cross-listed or co-conven If yes, list course Will this continue?	ed? yes 🗌	no X		
If r	an elective? Yes X or recequired, for what academic plan/surrequired, also submit <i>Proposal for</i>			? 🗆	
require	er courses or academic units, be afferments, etc.) yes ryes, explain in the justification and	no XX			
10. Does th	is change affect community college If yes, explain how in the justificati	articulation?	/ 	no XX tation from the a	ffected institutions.
:	Is the course a Common Course as If yes, has the change been approve	defined by your Art	iculation Task F n Task Force? y	orce? yes res no	no XX
	If this course has been listed in the be left as is, XX 0. If revised how should it be revised	r be revised?	. Guide, should t	hat listing	

11.	a. Proposed course subject /catalog number c. If subject/catalog number change, is there a course fee attached to the current subject/catalog						
Only fill in what is changing.	number that needs to be moved? Yes \(\subseteq \) No \(\subseteq \) If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.						
If	Data approved by UCC						
information is remaining the same,	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)						
leave the section blank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)						
	f. Proposed long course title (max 100 characters including spaces)						
	g. Proposed short course title						
	(max 30 characters including spaces)						
worki	h. Proposed catalog course description (max. 30 words, excluding requisites) ronic Media Staff Workshop (1) Professional hands-on production, post production, writing or sales experience in ing as a staff member in one of the departments of student media operations of UTV or KJACK radio. 1 hr. lecture, 3 ib. May be repeated for a maximum of 6 units. i. Proposed grading option: Letter grade Pass/Fail or Both XX (If both, the course may only be offered one way for each respective section.)						
	j. May course be repeated for additional units? yes no						
	j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no						
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):						
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Research						
	Seminar Field Studies Independent Study Activity Supervision						
	l. Proposed prerequisites (must be completed before) EMF 121 or 123 or 124 or 223 or 225 or 226 or 327						
	m. Proposed co-requisites (must be completed with) EMF 121 or 123 or 124 or 223 or 225 or 226 or 327.						
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent						

Instructor consent		Department consent		No consent	
12. Justification for course change.	Please indicate how pa	st assessments of stude	ent learning prom	pted proposed cl	ıanges.
Grading option needs to be this course are better suited	_		•	ise some sect	ions of
Catalogue Copy needs to be grade only"	e changed to delete	duplication of " fo	or up to 6 hrs.	" and delete	"Letter
Co-requisite change needs to options offered.	to be made to upda	te the catalogue to	current cour	se offerings a	ınd
13. Approvals Mark Derma			11-27-6	06	
Department Chair/Unit Head (if appropriate	i)		Date	/	
Chair of college curriculum committee	N	1) Sate		
Dean of college			Date		
For Committee use only	H		1/14/0-	7	
For University Curriculum Committee			Date		
Action taken: approved	as submitted	approved as modifi	ed		
Note: Submit original to associate provost'	s office. That office will provid	le copies to college dean, de	partment chair, and A	lcademic Informatio	m Office.

Revised 8/06

1. Is this a Liberal Studies or Diversity Course? Liberal St	tudies Diversity Both
No	
 Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) <u>See effective dates schedule</u> 	e. SP 07
3. College SBS	4. Academic Unit School of Communication
5. Current course subject/catalog number EMF 252	
6. Current catalog title, course description, and units. (Copy and Electronic Media Management Workshop (2) Hands-on e facilities, and managing departmental operations in a student radio. 2 hr. lecture, 4 hrs. lab Letter grade only. May be represented by the corequisite: EM 221 or EM 222 or EM 223.	experience in supervising staff members overseeing t media facility: UTV news, UTV production, KJACK
Change to: Letter grade or Pass/Fail Change to: Prerequisite or Corequisite: EMF 121or 123 or 1	124 or 223 or 225 or 226 or 327.
7. Is course currently cross-listed or co-convened? yes If yes, list course Will this continue? Yes 8. Is course an elective?	no X ——— Iemic plan/subplan?
If required, for what academic plan/subplan? If required, also submit Proposal for New Plan or Plan	un Change.
9. Will other courses or academic units, be affected by this change requirements, etc.) yes ☐ no X☐ If yes, explain in the justification and provide supporting	
10. Does this change affect community college articulation? If yes, explain how in the justification and provide su	yes no X no X pporting documentation from the affected institutions.
Is the course a Common Course as defined by your A If yes, has the change been approved by the Articulat	
If this course has been listed in the <u>Course Equivalent</u> be left as is, X or be revised? If revised, how should it be revised?	acy Guide, should that listing

11.	a. Proposed course subject /catalog number b. Proposed units				
	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog				
Only fill in	number that needs to be moved? Yes No				
what is If yes, please attach a Justification Form for Instructional Fees indicating the new course subjects hanging.					
rnanging.	number change.				
If	d. Proposed to co-convene with Date approved by UGC				
information is remaining	d. Proposed to co-convene with Date approved by UGC (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)	—			
the same,	(Must be approved by OGC prior to bringing to OCC. Both course symbol must be presented)				
leave the	e. Proposed to cross-list with				
section blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)				
	f. Proposed long course title				
	(max 100 characters including spaces)				
•	g. Proposed short course title				
	(max 30 characters including spaces)				
372	h. Proposed catalog course description (max. 30 words, excluding requisites	ı			
Elect	tronic Media Management Workshop (2) Hands-on experience in supervising staff members overseeing facilities managing departmental operations in a student media facility: UTV news, UTV production, KJACK radio. 2 hr.				
	ure, 4 hrs. lab. May be repeated for a maximum of 6 units.				
iccia	no, i mo mo ma po repenso de la manara del manara de la manara dela mana				
	i. Proposed grading option: Letter grade Pass/Fail or Both XX				
	(If both, the course may only be offered one way for each respective section.)				
	j. May course be repeated for <i>additional</i> units? yes no no				
	j.1. If yes, maximum units allowed?				
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)				
	yes XX no				
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):				
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research				
	200tab wo date should allo [] 200tab stay [] 211 any []				
	Seminar Field Studies Independent Study Activity Supervision				
	EMF 124 or EMF 223 or EMF 225 or EMF 226 or				
	1. Proposed prerequisites (must be completed before) EMF 327.	—			
	EMF 124 or EMF 223 or EMF 225 or EMF 226 or				
	m. Proposed corequisites (must be completed with) EMF 124 of EMF 225 of EMF				
	m. 110pobou vozvijanico (mant ov vompretou man)				
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)	ļ			
	Instructor consent Department consent No consent				

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes. Grading option needs to be changed because some sections of this course are better suited to a pass/fail option rather than graded.

Prerequisite or Correquisite changes need to be made in order to update the catalogue to current course offerings.

1	3	. A	n	D	ro	v	als

Mark Dema_	11-27-06
Department Chair/ Unit Head (if appropriate)	Date
1	
Chair of college curriculum committee	V-300
Dean of college	Date
For Committee use only	1/16/07
For University Curriculum Committee	Date
Action taken: approved as submitted	approved as modified

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

1. Is this co	urse a Liberal Studies Course?	yes 🔲	no 🛛	
	hange effective beginning of wha ing 2008, Summer 2008) <u>See effe</u>		Spring 2007	
3. College	School of Communication		4. Academic Uni	t Journalism
5. Current co	ourse subject/catalog number	JLS 208		· · · · · · · · · · · · · · · · · · ·
6. Current ca	atalog title, course description, a S 208 FIELDWORK E	und units. (Cut and pa XPERIENCE 3 u		
in a discipli	pervised field experience in an a ne. Pass-Fail only. Departmen or college is required.	appropriate organiza t consent required.	ation for students wh Prerequisite: Permi	no have a limited background ission of the supervising
7. Is course o	currently cross listed or co-conve If yes, list course Will this continue?	ned? yes 🗌	no 🛛	
	an elective? \(\sum \) or required, for what academic plan/s equired, also submit <i>Proposal for the proposal for the proposal</i>			
9. Will other requiren	courses or academic units, be afments, etc.) yes wes, explain in the justification an	fected by this change'	? (Consider prerequis	
	s change affect community colleg f yes, explain how in the justifica	-	yes no no noting documentation	from the affected institutions.
	s the course a Common Course as f yes, has the change been approv	• •		yes no
!	f this course has been listed in the be left as is, frevised, how should it be revised.	or be revised?	Guide, should that lis	sting

11.	a. Proposed course subject /catalog number b. Proposed units 3-9
	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog
Only fill in	number that needs to be moved? Yes No
what is	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog
changing.	number change.
If	
information	d. Proposed to co-convene with Date approved by UGC
is remaining	(must be approved by UGC before UCC)
the same,	e. Proposed to cross-list with
leave the section	V. 110 possed to 01000 flot filter
blank.	6 Dunnered lang course title
2	f. Proposed long course title
_	(max 100 characters including spaces)
-	
•	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	Supervised field experience in an appropriate organization for students who have a limited background in
	cipline. Pass-Fail only. Department consent required. Prerequisite: Permission of the supervising department or
colle	ge is required.
	i. Proposed grading option: Letter grade 🔲 Pass/Fail 🔀 or Both 🔲
	(If both, the course may only be offered one way for each respective section.)
	(1) voin, the course may only be offered one way for each respective sections
	Management of from additional position of the property of the
	j. May course be repeated for <i>additional</i> units? yes \(\sum_{\text{9}} \) no \(\sum_{} \)
	j.1. If yes, maximum units allowed? units
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)
	yes no 🛛
	11j.2.i. If yes, max units/term
	DI LI CONTRO CAL CALL LA
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	k.i. Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	K.i. Lecture w/o diffit embedded lab Lecture only Lab only Climbar Research
	Seminar Field Studies Independent Study Activity Supervision
	Seminar Environmental Production States Environmental Envi
	k.ii. In addition to the above, it will also be taught: Web 🔲 ITV 🗌 Hybrid Web 🔲 Hybrid ITV 🗌
	, <u> </u>
	1. Proposed prerequisites (must be completed before)
	i. I toposed prerequisites (must be esimpseed service)
	m. Proposed corequisites (must be completed with)
	m. Proposed corequisites (must be completed with)

n. If course has no requisite	es, will all sections of	the course require: (chec	k only one)		
Instructor consent	\boxtimes	Academic unit consent		No consent	
12. Justification for course change.	Please indicate how	past assessments of stude	ent learning prom	pted proposed c	hanges.
JLS 208 is a work-study co freshmen and sophomores v do not yet have the credits t	who want to worl	ι in a journalism en	vironment (T	he Lumberja	ıarily ıck) but
Can be repeated for up to 9	hours total, with	the minium-maxim	ium credits p	er semester l	peing 3-6.
		$\overline{}$			
13. Approvals	Willefte		5-10-6	6	
Department Chair/ Unit Head (if appropriate			Date		
Chair of college curriculum committee	A		11-130ane		
Dean of college	/ 		Date		
For Committee use only	GS	,	1/14/0	7	
For University Curriculum Committee			Date		
	as submitted	approved as modif			
Note: Submit original to associate provost'	s office. That office will pr	ovide copies to college dean, de	epartment chair, and	Academic Informati	on Office.

1. Is this course a Liberal Studies Course? yes	no 🛛
 Course change effective beginning of what term and yea (ex. Spring 2008, Summer 2008) <u>See effective dates sch</u> 	
3. College Social and Behavioral Sciences	4. Academic Unit School of Communication
5. Current course subject/catalog number JLS 230	§ •
6. Current catalog title, course description, and units. (Cut JLS 230 HUMOR WRITING (3) Introduction to the elements of humor writing, including	t and paste from current on-line academic catalog). ag the creation of jokes, sketches, monologues, and articles.
7. Is course currently cross listed or co-convened? yes If yes, list course Will this continue?	
8. Is course an elective? or required for an If required, for what academic plan/subplan? If required, also submit <i>Proposal for New Plan a</i>	or Plan Change.
9. Will other courses or academic units, be affected by this requirements, etc.) yes no	change? (Consider prerequisites, degree porting documentation from the affected departments.
10. Does this change affect community college articulation If yes, explain how in the justification and provi	n? yes no ide supporting documentation from the affected institutions.
Is the course a Common Course as defined by y If yes, has the change been approved by the Art	
If this course has been listed in the Course Equibe left as is, or be revised? If revised, how should it be revised?	

11.	a. Proposed course subject /catalog number		b. Proposed units	
Only fill in what is hanging.	c. If subject/catalog number change, is there a number that needs to be moved? Yes If yes, please attach a Justification Form for number change.	No 🗌	- -	-
	number change.			
f nformation	d. Proposed to co-convene with	Г	ate approved by UGC	1
remaining	(must be approved by UGC before UCC)		ato approved by CCC	
he same,	e. Proposed to cross-list with		•	>
eave the ection	- C. Idoposed to 0.038 list with		<u> </u>	
lank.	f. Proposed long course title			
	(max 100 characters including spaces)			
	· (
•	g. Proposed short course title			
	(max 30 characters including spaces)			
	(max 50 onaractors merading spaces)	•		
	h. Proposed catalog course description (max. 30 word	s, excluding requisites)		
•				
	i. Proposed grading option: Letter grade Pass/	Fail or Both		
	(If both, the course may only be offered one way	_	ion.)	•
•		,	,	
	j. May course be repeated for additional units?	yes 🔲 no 🗍		
	j.1. If yes, maximum units allowed?			
	j.2. If yes, may course be repeated for additional un	its in the same term? (ex	. BIO 300, PES 100)	•
	yes no	· ;		
	11j.2.i. If yes, max units/term			
•				
	k. Please check ONE of the following that most appro	onriataly describes the n	ronoged course change	(a):
	k. Thease eneck Of the following that most appro-	opriately describes the pr	oposed course change	(3).
	k.i. Lecture w/0 unit embedded lab Lecture	only 🛛 Lab only 🗌	Clinical	Research 🗌
	경기: 60 시대 역정 <u>원</u> 경인 대기 (1997년 1 <u>년</u> 1987년)			•
	Seminar Field Studies Indep	pendent Study 🔲 .	Activity 🗌	Supervision
	k.ii. In addition to the above, it will also be taught:	Web ITV	Hybrid Web 🗌	Hybrid ITV 🔲
	k.ii. in addition to the above, it will also be taught.		Hybrid Web	Tryond 11 V
	Proposed prerequisites (must be completed before)			
	i. Troposed prerequisites (must be completed before)			100 miles
	m. Proposed corequisites (must be completed with)			
	m. Troposed corequisites (must be completed with)	-		
	n. If course has no requisites, will all sections of the c	ourse require: (check on	ly one)	
	The second secon	demic unit consent	No con	sent 🔲
	manucioi consent [] Aca	denne unit consent	NO COIL	30/III []

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes. A previous course form apparently contained a typographical error, making this course an independent study, when it has actually been a lecture course. This form is just to change the listing for the course to the proper indication of "lecture."

13. Approvals Approvals	5-9.6
Department Chair/ Unit Head (if appropriate)	Date 33-03
Chair of college curriculum committee	Date
Dean of college	Date
For Committee use only Ron Call	1/11/0/107
For University Curriculum Committee	Date
Action taken: approved as submitted	approved as modified

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

PROPOSAL FOR COURSE DELETION

	ng 2008, Summer 2008) <i>See effect</i>	•		Spring 2007	
2. College	SBS		3.	Academic Unit PO	s
4. Current co	urse subject and catalog number	POS 159		·····	La Marie Carlo
	talog title, course description, and NATURE AND POLITICS		aste from <u>cu</u>	rrent on-line acaden	nic catalog.)
	major issues and controversi ources and land use from loc		~ -	-	_
6. Is this a L	iberal Studies or Diversity Course'	? Liberal Studi	ies 🛚	Diversity	Both 🗌
7. Is course c	urrently cross-listed or co-convene If yes, list course	ed? yes no	o 🛛		
	n elective? or required fo equired, for what academic plan/su	r an academic plan/si bplan? <u>Minor i</u>] nental Studies	
If re	equired, also submit <i>Proposal for</i>	Plan Change.			
yes 🗌	courses or academic units be affect no 🛛 es, explain in the justification and j				
	change affect community college yes, explain how in the justification			no 🔀 entation from the aff	ected institutions.
	the course a Common Course as d yes, has the change been approved			-	10 🗌
	this course is listed in the <u>Course</u>	· — '			

11. Justification for course deletion.

This course was meant to be a lower-division introduction to environmental politics; it was offered numerous times, but with very low enrollment. The seven-year review of POS suggested that we delete the course and replace it with an upper-division course in global environmental politics. This is what we are now proposing.

12. Approvais	
1/m	11.20.06
Department Chair/Unit Head (if appropriate)	Date
Λ) /	3050
Chair of college curriculum committee	Date
Dean of college	Date
For Committee use only	110016/07
For University Curriculum Committee	Date
Action taken: approved as submitted	approved as modified
Note: Submit original to associate provost's office. That office will provide cop	oies to college dean, department chair, and Academic Information

Office.

UNIVERSITY CURRICULUM COMMITTEE

1. Is this a	Liberal Studies or Diversity Course?	Liberal Stud	ies 🗌	Diversity []	Both 🗌
	change effective beginning of what ter ring 2008, Summer 2008) See effective		Fali 2	1007		
3. College	Social and Behavioral Sciences		4. Acade	emic Unit <u>Poli</u>	tical Science	
5. Current o	course subject/catalog number	POS 428		<u> </u>		
POS 42	catalog title, course description, and u 28 TOPICS IN PUBLIC ADMINIS' ational and international politics. M te: 15 earned hours or International	TRATION (3) ay be repeated for	Analyzes so	elected contemp	orary public	administration
7. Is course	currently cross-listed or co-convened If yes, list course Will this continue?	? yes 🗌	no			
Ifr	an elective? or required, for what academic plan/subprequired, also submit <i>Proposal for N</i>		Administra ent Emphas	tion/Public		
9. Will othe require	r courses or academic units, be affected ments, etc.) yes nowyes, explain in the justification and pro-	ed by this change?	(Consider)		_	nts.
	s change affect community college ar f yes, explain how in the justification	· · · · · · · · · · · · · · · · · · ·		no 🔀	ne affected ins	titutions.
	s the course a Common Course as def f yes, has the change been approved b				no no	
	f this course has been listed in the <u>Cou</u> be left as is, or be f revised, how should it be revised?	urse Equivalency G e revised?	<i>łuide</i> , shoul	d that listing		

11.	a. Proposed course subject /catalog number b. Proposed units
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes \Boxedow No \Boxedow \
what is changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
lf .	d Proposed to co-convene with Date approved by UGC
nformation s remaining the same,	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
leave the section	e. Proposed to cross-list with
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
_	(max 100 characters including spaces)
	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	i. Proposed grading option: Letter grade
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Research
	Seminar Field Studies Independent Study Activity Supervision
	l. Proposed prerequisites (must be completed before) Sophomore or greater status or International Exchange Student Group
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

The prerequisite of 15 earned hours has had the effect of preventing graduate students with less than 15 earned hours from enrolling. The intent of this requirement was to ensure a level of academic maturity, and all graduate students meet that condition.

13. Approvals	
	12.1.06
Department Chair/ Unit Head (if appropriate)	Date
	- ola
Chair of college curriculum committee	· A lane
Dean of college	Date
For Committee use only	1/16/07
For University Curriculum Committee	Date
Action taken: approved as submitted	approved as modified
Note: Submit original to associate provost's office. That office will provide copt	es to college dean, department chair, and Academic Information Office.

UNIVERSITY CURRICULUM COMMITTEE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both						
Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007						
3. College SBS 4. Academic Unit School of Communication						
5. Current course subject/catalog number VC 329						
 Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog). VC 329 typographics 1 Studio course. Explores traditional and conceptual typographic applications. Focuses on letter, word, line, paragraph, and type-image relationships. Computer-generated type at the intermediate level. 1 hr. lecture, 4 hrs. lab. Prerequisite: VC 152 and VC 251 						
7. Is course currently cross-listed or co-convened? yes no Will this continue?						
8. Is course an elective?						
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no x figure in the justification and provide supporting documentation from the affected departments.						
10. Does this change affect community college articulation? yes \(\subseteq\) no \(\maxscript{x}\subseteq\) no the affected institutions.						
Is the course a Common Course as defined by your Articulation Task Force? yes \square no $x\square$ If yes, has the change been approved by the Articulation Task Force? yes \square no \square						
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?						

11.	a. Proposed course subject /catalog number c. If subject/catalog number change, is there a course fee attached to the current subject/catalog				
Only fill in what is changing.	number that needs to be moved? Yes No I No I If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.				
If	Date approved by UGC				
information is remaining the same,	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)				
leave the section blank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)				
_	f. Proposed long course title (max 100 characters including spaces)				
	g. Proposed short course title (max 30 characters including spaces)				
	h. Proposed catalog course description (max. 30 words, excluding requisites)				
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)				
	j. 1. If yes, maximum units allowed? j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no				
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):				
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research				
	Seminar Field Studies Independent Study Activity Supervision				
	1. Proposed prerequisites (must be completed before) ART 135, ART 150, VC 152 and VC 251 with grades greater than or equal to C				
	m. Proposed corequisites (must be completed with)				
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent				

į....

Department Chair/Unit Head (if appropriate)

Chair of college curriculum committee

Dean of college

For Committee use only

For University Curriculum Committee

Action taken:

approved as submitted

approved as modified

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes. This is to standardize VC 331 graphic design 1 and VC 329 typographics 1 with the same

prerequisites.

UNIVERSITY CURRICULUM COMMITTEE

1. Is this a Liberal S	tudies or Diversity Course?	Liberal Studie	s 🗌	Diversity	Both 🗌
2. Course change ef (ex. Spring 2008	fective beginning of what te , Summer 2008) <u>See effectiv</u>	rm and year? ve dates schedule.	Fall 20	907	
3. College SBS			4. Acade	mic Unit <u>School</u>	of Communication
5. Current course su	oject/catalog number	VC 333			
VC 333 Graphic	tle, course description, and Design 3 Focuses on complex vi . 1 hr. lecture, 4 hr	sual communicat	ion prob	lems, such as	<i>demic catalog</i>). packaging design and
I	y cross-listed or co-convene yes, list course Vill this continue?	d? yes 🗌	no	x	
8. Is course an elect If required	ive?	uired for an academic plan? New Plan or Plan C		olan?	
requirements e	s or academic units, be affect.) yes \(\begin{array}{cccccccccccccccccccccccccccccccccccc	o x 🗔			
10. Does this chang	e affect community college xplain how in the justification	articulation? ye on and provide suppo	s 🔲	no x nentation from the	e affected institutions.
Is the co	ourse a Common Course as casthe change been approved	lefined by your Artic d by the Articulation	ulation Tas Task Force	sk Force? yes e? yes	□ no x□ no □
be left	ourse has been listed in the gas is, or or, or, how should it be revised?	be revised?	<i>Suide</i> , shoi	ıld that listing	

11.	a. Proposed course subject /catalog number b. Proposed units						
11.	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog						
Only fill in	week and had moode to be moved? Yes I NO I						
what is	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog						
changing.	number change.						
If	d. Proposed to co-convene with Date approved by UGC						
information	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)						
is remaining the same,	(Must be approved by OGC prior to bringing to OGC. Boild Contact Spine 1						
leave the	e. Proposed to cross-list with						
section blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)						
Diank.							
	f. Proposed long course title						
	(max 100 characters including spaces)						
•	g. Proposed short course title						
	(max 30 characters including spaces)						
	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -						
	h. Proposed catalog course description (max. 30 words, excluding requisites)						
	: Proposed grading option: Letter grade Pass/Fail or Both						
	I. Proposed grading option. Dottor grade						
	(If both, the course may only be offered one way for each respective section.)						
	i May course be repeated for additional units? yes \(\square\) no \(\square\)						
	j. Way comse de repeated for daditional dates.						
	j.1. If yes, maximum units allowed?j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)						
	yes no						
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):						
	Lecture w/0 umt embedded lab Li Lecture only Li Lab only Li						
	Seminar Field Studies Independent Study Activity Supervision						
	Schiller Live States Live 1						
	1. Proposed prerequisites (must be completed before) VC 332 and VC 330						
	1. 1 toposeu presequent						
	m. Proposed corequisites (must be completed with)						
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)						
	Instructor consent Department consent No consent						

13. Approvals May A A Day	11-27-06
Department Chair/Unit Head (if appropriate)	Date
Chair of college curriculum committee	Date
Dean of college	Date
For Committee use only	1/1/0/07
For University Curriculum Committee	Date
Action taken: approved as submitted approved as mod	iñed

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes. Students need the theory and practice covered in VC 330 to be successful in the completion of

assignments in VC 333.

Inbox (<Dominant>)

From: Ron Pitt <Ronald.Pitt@NAU.EDU> Subject: Re: Correction to Pre-requisites

To: Roger Bounds < Roger Bounds ...snip... Morrow < Nicole.Morrow@NAU.EDU>

Cc. Lisa.Williams@NAU.EDU, Trish.Rensink@NAU.EDU

Lisa;

Go ahead and make these changes to the courses listed below.

Nicole:

Please put this email on the next UCC agenda as a consent item for the requisite changes.

Trish:

HS 305W is out of order in the academic catalog. Will you please fix this so that it is in between HS 303 and 307.

At 12:12 PM 11/30/2006, Roger Bounds wrote:

Ron,

I have a question about some of our prerequisites in the Health Sciences Department.

We use the milestone process as a mechanism of tracking our Community Health Promotion student's progress through our curriculum. More specifically, we use the milestone in conjunction with our program admission procedure as a way of acknowledging those students who have been accepted into the upper division courses.

To do this, last year we place the "Community Health Milestone" as prerequisite on the appropriate upper sion courses. This system is working very well for these students.

The problem we are encountering is that several of these courses are also required in other programs where the program application and milestone does not apply. This results in a barrier to registration for certain students. So far, we have been dealing with this by granting overrides to students. Obviously, this is not the most efficient mechanism.

I spoke with Lisa Williams about different ways that we might fix the issue in a way that the registration system would enforce our prerequisite as intended, but not create barriers to enrollment for other students. We were able to come up with a solution that will enforce the milestone as a prerequisite for the Community Health Promotion Students, but not enforce it on students from the other programs. Lisa seemed to think this solution would allow the system to correctly enforce the prerequisites as they were intended.

The new prerequisites should be as follows:

HS 305W Prerequisite: (ENG 105 or HON 190 or HON 191 with a grade greater than or equal to B) **and** (HP 200 or HS 200 with grade greater than or equal to B) **and** (HP 300 or HS 300 with grade greater than or equal to C) **and** (Health Sci-Comm HIth Milestone **or** students in the BS HS: Allied Health Plan **or** Students in the BAS-HS plan **or** Student in the Physical Education School Health Plan)

HS 307 Prerequisite: (HP 300 or HS 300 with grade greater than or equal to C) and (HS 305W with a grade pater than or equal to C) and (HS 306 with a grade of C or better) and (Health Sci-Comm HIth Milestone students in the BS HS: Allied Health Plan or Students in the BAS-HS plan)

HS 333 Prerequisite: (HP 300 or HS 300 with grade greater than or equal to C) **and** (Health Sci-Comm Hlth Milestone **or** students in the BS HS: Allied Health Plan **or** Students in the BAS-HS plan)

HS 490 Prerequisite: (HP 200 or HS 200 with grade greater than or equal to B) **or** (HP 300 or HS 300 with grade greater than or equal to C) **and** (Health Sci-Comm HIth Milestone **or** students in the BS HS: Allied Health Plan **or** Students in the BAS-HS plan)

Since these are only changes that allow the system to work correctly, can I assume that there is no need to go through the UCC process? If so, can you forward this to Lisa for input into the system?

Thanks for all of your help.

Roger

Roger Bounds, Ph.D., CHES
Assistant Professor
Department of Health Sciences
Northern Arizona University
Flagstaff AZ, 86011-5095
(928) 523-6159
Roger.Bounds@nau.edu

X-Original-To: nam2@jan.ucc.nau.edu Delivered-To: nam2@jan.ucc.nau.edu Date: Fri, 08 Dec 2006 08:25:15 -0700

From: John J Doherty < John. Doherty @NAU.EDU>

Subject: Diversity Decision, FOR 270

To: thom.alcoze@NAU.EDU, Nicole Morrow <Nicole.Morrow@NAU.EDU>

User-Agent: Thunderbird 1.5.0.8 (Windows/20061025)

Dr. Alcoze --

The Diversity Subcommittee of UCC met yesterday and reviewed FOR 270 for US Ethnic Diversity.

On behalf of the subcommittee, I am pleased to inform you that we have reviewed the documentation and have approved FOR 270 for a US Ethnic Diversity designation. We were very pleased to be able to review this course and feel it will be a strong addition to the diversity course list.

This decision will be forward to UCC for final approval. Please let me know if you have any further questions.

~John Doherty, Chair

John J. Doherty, MA MLS Librarian, Arts & Letters Team Leader Cline Library, Northern Arizona University Flagstaff, AZ 86011-6022 928-523-8569 // 928-523-9180 (F) John.Doherty@nau.edu

Hi Nicole ---

I copied you in on this message. However, what I did not mention was that we approved this course for Fall 2006, the current semester.

~John

ucc Approval

PROPOSAL FOR COURSE CHANGE

1. Is this a	Liberal Studies or Diversity Course?	Liberal Studi	ies 🗌	Diversity		Both
	hange effective beginning of what terming 2008, Summer 2008) <u>See effective</u>		Fall 2	007		
3. College	CENS		4. Acade	emic Unit <u>E</u>	GR	
5. Current c	ourse subject/catalog numberl	EGR 286				
6. Current c	atalog title, course description, and un	nits. (Copy and pa	aste from <u>c</u>	urrent on-line	academi	<u>e catalog</u>).
ENGINE.	ERING DESIGN: THE PROC	ESS (3)				
assignmei	ing design process: cost constra nts, teamwork, ethics, professio H or CS 136) and (EE 188 or M	onalism, and c	omputer	skills. Pre	requisit	e: (EGR 186 or
7. Is course	currently cross-listed or co-convened? If yes, list course Will this continue?	yes 🗌	no			
	an elective?		, Electrical ntal Engr.,	Engr.,	_	
requiren If y	r courses or academic units, be affected nents, etc.) yes	ide supporting do	ocumentatio	on from the af	_	partments.
	f yes, explain how in the justification ar	•			the affec	ted institutions.
	s the course a Common Course as defin f yes, has the change been approved by	• •		•	no	no 🛛
ŧ	f this course has been listed in the <u>Cour</u> be left as is, or be r f revised, how should it be revised?	se Equivalency G evised?	<i>luide</i> , shoul	d that listing		

Revised 8/06

11.	a. Proposed course subject /catalog number	b. Proposed units					
Only fill in what is	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No I If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog						
changing.	number change.	uctional Fees marcating the new course s	uojeci/catatog				
If information	d. Proposed to co-convene with	Data approved by UGC					
is remaining the same, leave the	(Must be approved by UGC prior to bringing to UCC. Be	Date approved by UGC oth course syllabi must be presented.)					
section blank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be u	sed for all cross-listed courses.)					
_	f. Proposed long course title (max 100 characters including spaces)						
7	g. Proposed short course title (max 30 characters including spaces)						
	h. Proposed catalog course description (max. 30 words, excl	luding requisites)					
	i. Proposed grading option: Letter grade Pass/Fail (If both, the course may only be offered one way for ed j. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for additional units in the yes no mo may no	or Both no no	ming skills,				
	k. Please check ONE of the following that most appropriate	ely describes the proposed course change	(s):				
	Lecture w/0 unit embedded lab Lecture only	Lab only Clinical	Research [
	Seminar Field Studies Independen	nt Study Activity	Supervision				
	Proposed prerequisites (must be completed before)	(EE 188 or ME 180 or CENE (EGR 186 or EGR 186H) with greater than or equal to C	•				
	m. Proposed corequisites (must be completed with)	EE 188 or ME 180 or CENE 1	80				
	n. If course has no requisites, will all sections of the course Instructor consent Department	require: (If course has pre or co requisite, ski ment consent \(\sum \) No conse					

Revised 8/06

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

Description revised to better reflect course content. The design sequence of courses in engineering (186, 286, 386, and 486), known as Design 4 Practice, has undergone refinement over the years. The change in course description is intended to reflect the current content of the course, which we anticipate will not change in the foreseeable future.

Prerequisite: removed CS 136 prerequisite. Corequisites did not change (restated in Item 11-m for clarity).

	Khi -			
	· · · · · · · · · · · · · · · · · · ·		11/15/06	
	Department Chair/ Unit Head (if appropriate)		Date	
	- Grane A Glidelamil		100-1-06	
	Chair of college curriculum committee		Date	
L	J3 Juenneke		7 Dec 06	
U	Dean of college		Date	
	For Committee use only		1114107	
	For University Curriculum Committee		Date	
	Action taken: approved as submitted	approved as modified		

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

13. Approvals

Letter of support from Electrical Engineering:

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

Subject: Re: Revised EGR 286 description for catalog

Date: Tue, 31 Oct 2006 11:30:32 -0700

From: David Scott Scott@NAU.EDU
To: Debra Larson Scott@NAU.EDU
References: Scott@NAU.EDU
References: Scott@NAU.EDU

Deb,

I am not sure that CS136 even belongs in the list anymore since CS students don't take this course. I am also concerned that EGR286 may be overwhelmed with students if the prerequisites are relaxed. We should be ready to offer two sections of this class next fall anyway, however, so maybe that won't be too much of a problem. Dave Scott

Letter of support from Mechanical Engineering

John Tester wrote:

Deb.

Looks good to both of us.

Date: Tue, 31 Oct 2006 14:16:30 -0700

From: David Hartman david.hartman@nau.edu

Subject: Re: Fwd: Revised EGR 286 description for catalog

To: John Tester John.Tester@nau.edu>

User-Agent: Thunderbird 1.5.0.4 (Windows/20060516)

I'm flattered to be included in the decision (I think). Your new description looks really good to me. It should last for another year or two. And it should have no effect on ABET — we're simply doing what is required, CPI (continuous program improvement).

John Tester wrote:

Dave,

In reference to this email: Deb and I have been discussing this change already. What do you think? I don't see a major problem with it, unless our ABET accreditation process hinges on it. The deletion of the cost aspects, from an ME Dept point of view, is not a problem, as we will cover this in Senior design now (ME 476C).

Date: Tue, 31 Oct 2006 11:12:54 -0700

From: Debra Larson debra.larson@nau.edu>

Subject: Revised EGR 286 description for catalog

To: Paul Gremillion < Paul Gremillion @nau.edu>,

John Tester John Tester John Tester @nau.edu>

Cc: David Scott < David Scott@nau.edu>

User-Agent: Thunderbird 1.5.0.7 (Windows/20060909)

Paul (and John and Dave),

The current catalog description for EGR 286 is:

EGR 286 ENGINEERING DESIGN: THE PROCESS (3)

Engineering design process: cost constraints, individualized written and oral communication assignments, teamwork, ethics, professionalism, and computer skills. Prerequisite: (EGR 186 or EGR 186H or CS 136) and (EE 188 or ME 180 or CENE 180) with grades greater than or equal to C

I am proposing it be changed to:

EGR 286 ENGINEERING DESIGN: THE PROCESS (3)

The process of engineering design, mechanisms and controls, computer and programming skills, teamwork and project management, written and oral communications. Co-requisite: (EE 188 or ME 180 or CENE 180). Prerequisite: (EGR 186 or EGR 186H or CS 136) with grades greater than or equal to C

For John and Dave...This change better reflects what is going on in EGR 286 since it was revised back in 04. Moving part of the prerequisite to a co-requisite provides a bit more flexibility for students in their schedules, and these particular skills are not, today, required components of what is going on in 286. Paul G is the CENE's curriculum rep and he is right in the middle of preparing a curriculum change submittal, so we thought we could take on EGR 286 at the same time, you are both in agreement.

deb

John T. Tester, Ph.D.
Associate Professor, Mech. Engr.
College of Engineering & Natural Sciences
P.O. Box 15600, Bldg. 69
Northern Arizona University
Flagstaff, AZ 86011-5600
Voice: 928-523-0032

Fax: 928-523-2300

Revised 8/06 EGR 286

PROPOSAL FOR COURSE CHANGE

1. Is this a Libe	ral Studies or Diversity Course?	Liberal Studie	s 🗌	Diversity		Both []
	ge effective beginning of what ter 2008, Summer 2008) <i>See effective</i>		Fall 20	07			
3. College Cl	ENS		4. Acaden	nic Unit <u>C</u> I	ENE		
5. Current cours	e subject/catalog number	CENE 180					
6. Current catalo	og title, course description, and u	nits. (Copy and pas	ste from <u>cur</u>	rent on-line	academic c	atalog).	
COMPUTEI	R AIDED DRAFTING	(2)					
standards, sc hour laborat	ls of graphical communical aling, and basic civil and ory. Prerequisite: MAT 1. Corequisite: MAT 125 o	environmental e 25 or MAT 125	ngineerii H or high	ng applica	tions. 1 h	our lectu	
7. Is course curre	ently cross-listed or co-convened If yes, list course Will this continue?	? yes 🗌	no [
-	lective? or required, for what academic plan/subpired, also submit <i>Proposal for N</i>		Environme		l 		
requirement	urses or academic units, be affecte s, etc.) yes					tments.	
	ange affect community college ar s, explain how in the justification			no 🔀	the affected	d institution	18.
	course a Common Course as def s, has the change been approved b	• •		· -	no [no 🛛	
be le	s course has been listed in the \underline{Co} eft as is, \square or be ised, how should it be revised?	urse Equivalency Gi e revised?	<i>iide</i> , should	that listing			

Revised 8/06 CENE 180

11.	a. Proposed course subject /catalog number b. Proposed units	
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog	
Only fill in number that needs to be moved? Yes No No what is		
changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.	
1f		
information	d. Proposed to co-convene with Date approved by UGC	
is remaining	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)	
the same, leave the		
section	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)	
błank.	(1 teuse submit a single cross-tistea syllabus that will be used for all cross-tistea courses.)	
	f. Proposed long course title	
	(max 100 characters including spaces)	
,	g. Proposed short course title	
	(max 30 characters including spaces)	
	h. Proposed catalog course description (max. 30 words, excluding requisites)	
•		
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)	
	(2) voin, the course may only be offered one way for each respective sections,	
	j. May course be repeated for additional units? yes no no	
	j.1. If yes, maximum units allowed?	
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no	
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):	
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research	
	Seminar Field Studies Independent Study Activity Supervision	
	Proposed prerequisites (must be completed before)	
	m. Proposed corequisites (must be completed with)	
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent	

As part of our preparation for an accreditation visit, we have developed a matrix of learning outcomes for each of our courses. A learning outcome associated with engineering design has been an element of this course, but is not included in the course description. The proposed revision corrects this omission.

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	11/15/06
Department Chair/Unit Head (if appropriate)	Date (200 = 0 > 06
Chair of college curriculum committee A Frenche	100-07-06 Date 7 Dec 06
/Dean of college	Date
For Committee use only	1/16/07
For University Curriculum Committee	l Date l
Action taken: approved as submitted Note: Submit original to associate provost's office. That office will provide	approved as modified

PROPOSAL FOR COURSE CHANGE

See effective dates schedule Fall 2007	1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both	
5. Current course subject/catalog number CENE 251 6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog). APPLIED MECHANICS STATICS (3) Fundamentals of applied mechanics, vector algebra, equivalent force systems, equations of equilibrium, structures, moments of plane areas, centroids, friction. Prerequisite: (PHY 161 and PHY 161L) or (PHY 262 and PHY 262L) and MAT 137 or higher with grade greater than or equal to C 7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue? 8. Is course an elective? or required for an academic plan/subplan? Civil Engr., Electrical Engr., Engr. Physics, Environmental Engr., and Mechanical Engritorium Engr., and Mechanical Engr. If required, for what academic plan/subplan? Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments. 10. Does this change affect community college articulation? yes no If yes, explain how in the justification and provide supporting documentation from the affected institutions. Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? yes no If this course has been listed in the Course Equivalency Guide, should that listing be left as is, or be revised?	Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007	
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog). APPLIED MECHANICS STATICS (3) Fundamentals of applied mechanics, vector algebra, equivalent force systems, equations of equilibrium, structures, moments of plane areas, centroids, friction. Prerequisite: (PHY 161 and PHY 161L) or (PHY 262 and PHY 262L) and MAT 137 or higher with grade greater than or equal to C 7. Is course currently cross-listed or co-convened?	3. College CENS 4. Academic Unit CENE	
Fundamentals of applied mechanics, vector algebra, equivalent force systems, equations of equilibrium, structures, moments of plane areas, centroids, friction. Prerequisite: (PHY 161 and PHY 161L) or (PHY 262 and PHY 262L) and MAT 137 or higher with grade greater than or equal to C 7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue? 8. Is course an elective? or required for an academic plan/subplan? Civil Engr., Electrical Engr., Engr. Physics, Environmental Engr., and Mechanical Engr. If required, for what academic plan/subplan? Engr. 9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments. 10. Does this change affect community college articulation? yes no If yes, explain how in the justification and provide supporting documentation from the affected institutions. Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? yes no If this course has been listed in the Course Equivalency Guide, should that listing be left as is, or be revised?	5. Current course subject/catalog number CENE 251	
Fundamentals of applied mechanics, vector algebra, equivalent force systems, equations of equilibrium, structures, moments of plane areas, centroids, friction. Prerequisite: (PHY 161 and PHY 161L) or (PHY 262 and PHY 262L) and MAT 137 or higher with grade greater than or equal to C 7. Is course currently cross-listed or co-convened?	6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).	
equilibrium, structures, moments of plane areas, centroids, friction. Prerequisite: (PHY 161 and PHY 161L) or (PHY 262 and PHY 262L) and MAT 137 or higher with grade greater than or equal to C 7. Is course currently cross-listed or co-convened?	APPLIED MECHANICS STATICS (3)	
If yes, list course Will this continue? 8. Is course an elective?	equilibrium, structures, moments of plane areas, centroids, friction. Prerequisite: (PHY 16 PHY 161L) or (PHY 262 and PHY 262L) and MAT 137 or higher with grade greater than	1 and
Civil Engr., Electrical Engr., Engr. Physics, Environmental Engr., and Mechanical If required, for what academic plan/subplan? If required, also submit Proposal for New Plan or Plan Change. O. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes	If yes, list course	
If required, also submit <i>Proposal for New Plan or Plan Change</i> . 9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes	Civil Engr., Electrical Engr., Engr. Physics, Environmental Engr., and Mechanical	
requirements, etc.) yes		
If yes, explain how in the justification and provide supporting documentation from the affected institutions. Is the course a Common Course as defined by your Articulation Task Force? yes	requirements, etc.) yes no	
If yes, has the change been approved by the Articulation Task Force? yes on If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised?		ns.
be left as is, or be revised?		
	be left as is, or be revised?	

Revised 8/06

11.	a. Proposed course subject /catalog number	b. Proposed units
Only fill in	c. If subject/catalog number change, is there	a course fee attached to the current subject/catalog
what is	number that needs to be moved? Yes	No No No Instructional Fees indicating the new course subject/catalog
changing.	number change.	or histractional rees indicating the new course subject/catalog
If		
information	d. Proposed to co-convene with	Date approved by UGC
is remaining	(Must be approved by UGC prior to bringing to U	CC. Both course syllabi must be presented.)
the same, leave the		· · · · · · · · · · · · · · · · · · ·
section	e. Proposed to cross-list with	·
blank.	(Please submit a single cross-listed syllabus that w	ill be used for all cross-listed courses.)
	f. Proposed long course title	
	(max 100 characters including spaces)	
.	(Marie 100 omaration morating spaces)	
7	g. Proposed short course title	
	(max 30 characters including spaces)	
	(man 50 omatacies including spaces)	
	h. Proposed catalog course description (max. 30 word	ds, excluding requisites)
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Fun	damentals of applied mechanics, vector algo	Phra, equivalent force systems, equations of
eaui	ilibrium, structures, centroids, friction, mon	nents of inertia
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	i. Proposed grading option: Letter grade Pass	/Fail or Both
	(If both, the course may only be offered one way	y for each respective section.)
	j. May course be repeated for additional units?	yes no
	j.1. If yes, maximum units allowed?	· · · · · · · · · · · · · · · · · · ·
	j.2. If yes, may course be repeated for additional ur	its in the same term? (ex. BIO 300, PES 100)
	yes	
	k. Please check ONE of the following that most appr	opriately describes the proposed course change(s):
		y everyone me proposed counce change(c).
	Lecture w/0 unit embedded lab Lecture	only Lab only Clinical Research
	Seminar Field Studies Inde	condent Study
	- Schillar [Freid Studies [Hide]	pendent Study Activity Supervision
		(PHY 161 and PHY 161L) or (PHY 262 and
		PHY 262L) and MAT 137 or higher with
	I. Proposed prerequisites (must be completed before)	grade greater than or equal to C
	x x Toposed proxoquisites (mast or completed octors)	grade greater than or equal to C
	m. Proposed corequisites (must be completed with)	MAT 137
	2 sovequiones (must be completed with)	/
	n. If course has no requisites, will all sections of the c	ourse require: (If course has pre or co requisite, skip to question 12)

CENE 251

Instructor consent		Department consent		No consent	
12. Justification for course change. 1	Please indicate how past	assessments of stude	ent learning promp	oted proposed cl	nanges.
As part of our preparation for descriptions. Course content engineering. The proposed c	t has been modified	gradually to ref	lect current p	ved all of ou ractice in	r course
MAT 137 added as a corequi MAT 137 occurs late enough	isite to improve stud in course that MAT	ent accessibility	to course. Reed as corequis	equisite cont ite.	ent of
Prerequisites not changed, budropped.	ut repeated in Line	11-I to clarify th	at the prerequ	iisite has not	been
13. Approvals			11/15/) 6	
Department Chair/ Unit Head (if appropriate)	Wellen IS	4	Date () () - (16	
Chair of college curriculum committee Dean of college	meke		Date 7 Dec 6	06	
For University Curriculum Committee	8df		1/10/	07	
Action taken: approved as	submitted	approved as modific	Date •		
Note: Submit original to associate provost's of	ffice. That office will provide c	opies to college dean, de _l	partment chair, and Ac	cademic Information	1 Office.

Letter of Support from Electrical Engineering:

Subject: Re: Letter of support for CENE 251 change

From: David Scott < David.Scott@NAU.EDU>

Date: Wed, 15 Nov 2006 08:42:16 -0700

To: Paul Gremillion <paul.gremillion@NAU.EDU>

Paul,

This change will not affect the electrical engineering program and we support the change.

Paul Gremillion wrote:

Hi-

We propose to revise the prerequisites for CENE 251 so that MAT 137 is a corequisite. We also want to update the course description. Attached is the course change form. Can you provide an email of support for this?

Let me know if you have questions.

Thanks,

Paul

David R. Scott, Ph.D.

Chair, Electrical Engineering Department, Northern Arizona University

P.O. Box 15600, Flagstaff, Arizona, 86011-5600 Phone: 928-523-3162 Fax: 928-523-2300

Email: David.Scott@nau.edu

Department Webpage: http://www.cens.nau.edu/Academic/EE

Letter of Support from Mechanical Engineering:

Subject: Re: Letter of support for CENE 251 change From: David Hartman david.hartman@NAU.EDU

Date: Wed, 15 Nov 2006 17:18:24 -0700

CC: cet-me@cet.nau.edu

The faculty in Mechanical Engineering today recorded in a department meeting that they do not see a problem with your suggestion of using MAT 137 as a Co-Req for CENE 251 Statics.

Paul Gremillion wrote:

Hi -

We propose to revise the prerequisites for CENE 251 so that MAT 137 is a corequisite. We also want to update the course description. Attached is the course change form. Can you provide an email of support for this?

Let me know if you have questions.

Thanks,

Paul

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both Both
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 270
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
PLANE SURVEYING (3)
Surveying instruments and basic procedures including error analysis; note keeping; measurement of distance, elevation, and angles with appropriate precision; traversing; stadia; and topographic mapping. 2 hrs. lecture, 3 hrs. lab. Prerequisite: MAT 125 or MAT 125H with grade greater than or equal to C or Math Placement 55 or higher or International Student Group
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?
3. Is course an elective? or required for an academic plan/subplan? If required for what and the include of the plan is th
If required, for what academic plan/subplan? <u>Civil Engr., Environmental Engr.</u> If required, also submit <i>Proposal for New Plan or Plan Change.</i>
Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes \(\sum \no \sum \subset \) If yes, explain in the justification and provide supporting documentation from the affected departments.
0. Does this change affect community college articulation? yes No X If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? Yes no I
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised?
If revised, how should it be revised? Revise course title.

Revised 8/06

11.	a. Proposed course subject /catalog number b. Proposed units		
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog		
what is	number that needs to be moved? Yes No		
changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.		
If			
information	d. Proposed to co-convene with Date approved by UGC		
is remaining the same,	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)		
leave the	. Decree 1		
section blank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)		
Diank.	(* 100000 5000 mil a 500gic cross-tisted syndrous that will be used for all cross-tisted courses.)		
	f. Proposed long course title SURVEYING		
	(max 100 characters including spaces)		
. *	g. Proposed short course title		
	(max 30 characters including spaces) SURVEYING		
	h. Proposed catalog course description (max. 30 words, excluding requisites)		
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)		
	(1) volly the course may only be offered one way for each respective section.)		
	j. May course be repeated for additional units? yes no		
	j.1. If yes, maximum units allowed?		
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)		
	yes no no		
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):		
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research		
	Seminar Field Studies Independent Study Activity Supervision		
	Proposed prerequisites (must be completed before)		
	m. Proposed corequisites (must be completed with)		
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent		

CENE 270

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes in course title and description reflect the current content of the course.

	11/15/06
partment Chair/ Unit Head (if appropriate)	Date
A Kane Al Molestino 1992	UC-07-06
air of college curriculum committee	Date
Liturneke	7 Dec 06
ean of college	Date
or Committee use only	11110107
University Curriculum Committee	Date
approved as submitted approve	d as modified

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both Diversity
Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 280
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
ENVIRONMENTAL ENGINEERING FUNDAMENTALS (3)
A course in environmental engineering fundamentals that applies biological, chemical, and mathematical principles to solve environmental engineering problems using the mass balance approach. Prerequisite: (BIO 181 and CENE 150 and CHM 152 and MAT 136 or MAT 136H with grade greater than or equal to C) or International Student Group
7. Is course currently cross-listed or co-convened? yes no Mill this continue?
8. Is course an elective?
 Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments.
10. Does this change affect community college articulation? yes No No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

11.	a. Proposed course subject /catalog number b. Proposed units
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog
what is	number that needs to be moved? Yes No
changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
If information	d Dromogod to an account of the
is remaining	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
the same,	(1920) to approved by OGC prior to oringing to OCC. Both course syllabi must be presented.)
leave the section	e. Proposed to cross-list with
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
_	(max 100 characters including spaces)
7	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)
	j. May course be repeated for <i>additional</i> units? yes no j.1. If yes, maximum units allowed?
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab
	Seminar Field Studies Independent Study Activity Supervision
	(BIO 181 and CENE 150 and CHM 152 and MAT 136 or MAT 136H with grade greater
	than or equal to C) or International l. Proposed prerequisites (must be completed before) Student Group
	m. Proposed corequisites (must be completed with) BIO 181
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)
	Instructor consent Department consent No consent

BIO 181 listed as corequisite or prerequisite to improve student accessibility to course. BIO 181 content necessary for CENE 280 occurs late in 280 course.

Prerequisites unchanged, but repeated in Line 11-l to clarify that prerequisites were not dropped.

Kell-	11/15/06
epartment Chair/ Unit Head (if appropriate)	Date
Main A Glife World	Nac 7 2006
nair of college curriculum committee	Date "
J. Huenneke	7 Dec 06
ean of college	Date
or Committee use only	1116/07
or University Curriculum Committee	Date
etion taken: approved as submitted	approved as modified

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both Both
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 330
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
AIR QUALITY ENGINEERING (3)
Technical approaches to air quality problems; source identification; acid deposition; ozone; control of primary and toxic air pollutants; indoor air quality. Prerequisite: CENE 280 and MAT 137 with grades greater than or equal to C
7. Is course currently cross-listed or co-convened? yes no Mill this continue?
8. Is course an elective?
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes If yes, explain in the justification and provide supporting documentation from the affected departments.
10. Does this change affect community college articulation? yes \(\sumsymbol{\substack}\) No \(\simes\) If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised?

Revised 8/06 CENE 330

11.	a. Proposed course subject /catalog number b. Proposed units		
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No		
what is	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog		
changing.	number change.		
If			
information is remaining	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)		
the same,	(Massi ve approved by OOC prior to bringing to OCC. Both course syndol must be presented.)		
leave the section	e. Proposed to cross-list with		
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)		
	f. Proposed long course title		
	(max 100 characters including spaces)		
•			
•	g. Proposed short course title		
	(max 30 characters including spaces)		
	h. Proposed catalog course description (max. 30 words, excluding requisites)		
	ign and analytical approaches to air quality problems; source identification; acid deposition;		
OZ01	ne; control of primary and toxic air pollutants; indoor air quality.		
	i. Proposed grading option: Letter grade Pass/Fail or Both		
	(If both, the course may only be offered one way for each respective section.)		
	j. May course be repeated for additional units? yes no no		
	j.1. If yes, maximum units allowed?		
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)		
	yes		
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):		
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Research		
	Seminar Field Studies Independent Study Activity Supervision		
	l. Proposed prerequisites (must be completed before)		
	m. Pronoced correquisites (resuct he completed with)		
	m. Proposed corequisites (must be completed with)		
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)		
	Instructor consent Department consent No consent		

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

Col	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
Allan Allahod	12-77-06
Chair of college curriculum committee	Date
L' Luenneke	7 Dec 06
Dean of college	Date
For University Curriculum Committee	1/1U/07
Action taken: approved as submitted	approved as modified
Note: Submit original to associate provost's office. That office will provide	e copies to college dean. department chair. and Academic Information Office

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 332
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
SOLID AND HAZARDOUS WASTE MANAGEMENT (3)
Waste identification, physicochemical properties, fate and transport in the environment, site characterization and assessment, remediation tools and technologies. Prerequisite: CENE 280 and (CHM 230 or CHM 235 or CHM 440) with grades greater than or equal to C
7. Is course currently cross-listed or co-convened? yes no Mill this continue?
8. Is course an elective?
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments.
10. Does this change affect community college articulation? yes No No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes , has the change been approved by the Articulation Task Force? Yes no I
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, \(\sum \) or be revised? \(\sum \) If revised, how should it be revised?

Revised 8/06 CENE 332

11.	a. Proposed course subject /catalog number	b. Proposed units
Only fill in	c. If subject/catalog number change, is there a cours	
what is changing.	number that needs to be moved? Yes No If yes, please attach a Justification Form for Instrumental number change.	actional Fees indicating the new course subject/catalog
If		D
information is remaining the same,	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Box	Date approved by UGC The course syllabi must be presented.)
leave the section blank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be us	ed for all cross-listed courses.)
	f. Proposed long course title (max 100 characters including spaces)	
•	g. Proposed short course title (max 30 characters including spaces)	
	h. Proposed catalog course description (max. 30 words, exch	nding requisites)
	i. Proposed grading option: Letter grade Pass/Fail (If both, the course may only be offered one way for each May course he repeated for additional units?	ch respective section.)
	j. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for additional units in the yes no	no la
	k. Please check ONE of the following that most appropriate	ly describes the proposed course change(s):
	Lecture w/0 unit embedded lab Lecture only	Lab only Clinical Research
	Seminar Field Studies Independent	Study Activity Supervision
	Proposed prerequisites (must be completed before)	(CHM 230 or CHM 235) and CENE 280 or for non-majors (CHM 230 or CHM 235) and (BIO 300 or higher, or CHM 300 or higher, or ENV 280, or GLG 300 or higher, or PHY 300 or higher)
<u></u>	m. Proposed corequisites (must be completed with)	

n. If course has no requisites, will all sections of the course	irse require: (If course has pr	e or co requisite, skip to question 12)
Instructor consent	partment consent	No consent
12. Justification for course change. Please indicate how past as	sessments of student learnin	g prompted proposed changes.
As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.		
We have also developed a matrix of learning outcomes for each of our courses. A learning outcome associated with engineering design has been an element of this course, but is not included in the course description. The proposed revision corrects this omission.		
Prerequisites changed to improve accessibility to t	he course by non-engi	ineering students.
13. Approvals		1/15/06
Department Chair/ Unit Head (if appropriate)		Date
- Abun A Millians	- A	20-7-06
Chair of college curriculum committee	Ī	Date
1 Laturneke	7	Dec 06
Dean of college		Date
For Committee use only For University Curriculum Committee	1/1	U107
For University Curriculum Committee		Daic
Action taken: approved as submitted Note: Submit original to associate provost's office. That office will provide cop	approved as modified ies to college dean, department ch	air, and Academic Information Office.

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both
Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 333
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
APPLIED HYDRAULICS (3)
Hydraulic considerations for public works wells, pump distribution systems, gravity flow systems, and treatment-plant design use of computer analysis techniques. Prerequisite or Corequisite: CENE 333L and ME 395
7. Is course currently cross-listed or co-convened? yes no Mill this continue?
8. Is course an elective?
 Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments.
10. Does this change affect community college articulation? yes No No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

11.	a. Proposed course subject /catalog number b. Proposed units		
Only fill in	number that read to it is there a course fee attached to the current subject/catalog		
what is changing.	If yes, please attach a Justification Form for Instructional Fees indicating the		
	number change.		
If information	d Proposed to an access of		
is remaining	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)		
the same, leave the	Both course syllabi must be presented.)		
section	e. Proposed to cross-list with		
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)		
	f. Proposed long course title		
	(max 100 characters including spaces)		
	g. Proposed short course title		
	(max 30 characters including spaces)		
	h. Proposed catalog course description (max. 30 words, excluding requisites)		
Hyd	raulic analysis and design for water systems, including wells, pumps, pressurized distribution		
syste	ems, open-channel flow, and culverts.		
	i. Proposed grading option: Letter grade Pass/Fail or Both		
	(If both, the course may only be offered one way for each respective section.)		
	j. May course be repeated for additional units? yes no		
	j.1. If yes, maximum units allowed?		
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)		
	yes no		
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):		
	Lecture w/0 unit embedded lab		
	Research _		
	Seminar 🗌 Field Studies 🗌 Independent Study 🔲 Activity 🔲 Supervision 🔲		
	l. Proposed prerequisites (must be completed before) ME 395 with a grade greater than or equal to C		
:	m. Proposed corequisites (must be completed with) ME 395 and CENE 333L		
_			
1	In If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)		
	Department consent No consent No consent		

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

We have also developed a matrix of learning outcomes for each of our courses. A learning outcome associated with engineering design has been an element of this course, but is not included in the course description. The proposed revision corrects this omission.

Prerequisite minimum grade of C identified for consistency: All science and engineering prerequisite courses must have a grade of C or higher.

Corequisite unchanged, but repeated in Line 11-m to clarify that corequisite has not been dropped.

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Department Chair/ Unit Head (if appropriate)	11/15/06
Department Chair Offic Head (11 appropriate)	Date
Chair of college cufriculum committee	1/20-7-06
Chair or conege curricanini committee	Date
Dean of college	7 Dec 06
, bear of conege	Date
For Committee use only For University Curriculum Committee	1/14/07
outhing committee	Date
Action taken: approved as submitted	approved as modified

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both Diversity
Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 333L
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
APPLIED HYDRAULICS LAB (1)
Lab for CENE 333. Provides hands-on experience in solving design problems using contemporary hydraulics software, lab demonstrations, field work, and site visits. Corequisite: CENE 333.
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?
8. Is course an elective?
 Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments.
10. Does this change affect community college articulation? yes No No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? Yes no
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, \boxtimes or be revised? \square If revised, how should it be revised?

11.	a. Proposed course subject /catalog number b. Proposed units
only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog
hat is	number that needs to be moved? Yes No
hanging.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
F	
formation	d. Proposed to co-convene with Date approved by UGC
remaining e same,	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
ave the	
ction	e. Proposed to cross-list with
ınk.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
	(max 100 characters including spaces)
•	3 · P···········
	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	, , , , , , , , , , , , , , , , , , , ,
	i. Proposed grading option: Letter grade Pass/Fail or Both
	(If both, the course may only be offered one way for each respective section.)
	j. May course be repeated for additional units?
	j.1. If yes, maximum units allowed?
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)
	yes no
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Seminar Field Studies Independent Study Activity Supervision
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Seminar Field Studies Independent Study Activity Supervision 1. Proposed prerequisites (must be completed before)
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Seminar Field Studies Independent Study Activity Supervision
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Seminar Field Studies Independent Study Activity Supervision 1. Proposed prerequisites (must be completed before) m. Proposed corequisites (must be completed with) CENE 333
	Lecture w/0 unit embedded lab
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Seminar Field Studies Independent Study Activity Supervision 1. Proposed prerequisites (must be completed before) m. Proposed corequisites (must be completed with) CANE 333
	Lecture w/0 unit embedded lab
	Lecture w/0 unit embedded lab

CENE 333L

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

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	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
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Chair of college curriculum committee	Date
Dean of college	7 Dec 06
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For Committee use only For University Curriculum Committee	1116107
Tor Oniversity Curriculum Commintee—	Date
Action taken: approved as submitted	approved as modified
Note: Submit original to associate provost's office. That office will provide copie	es to college dean, department chair, and Academic Information Office.

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 376
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
STRUCTURAL ANALYSIS I (3)
Determinate structures, cables, V&M diagrams, influence lines, moving loads, deflection methods, approximate analysis of indeterminate structures, and computer analysis. Prerequisite: CENE 253 with grade greater than or equal to C
7. Is course currently cross-listed or co-convened? yes no Mill this continue?
If required, for what academic plan/subplan?
O. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes No If yes, explain in the justification and provide supporting documentation from the affected departments.
0. Does this change affect community college articulation? yes \(\sumsymbol\) No \(\sumsymbol\) If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? Yes no I
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, \(\sum \) or be revised? \(\sum \) If revised, how should it be revised?

11.	a. Proposed course subject /catalog number b. Proposed units
Only fill in what is changing.	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog
If	number change.
information is remaining the same,	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
leave the section blank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
_	f. Proposed long course title (max 100 characters including spaces)
	g. Proposed short course title (max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.) j. May course be repeated for additional units? yes no j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no
	k. Please check ONE of the following that most appropriately describes the proposed course change(s): Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Seminar Field Studies Independent Study Activity Supervision
	Proposed prerequisites (must be completed before)
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent

The course description has been revised to clarify terminology that may be unfamiliar to the reader.

	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
Chair of college curriculum committee	<u> </u>
LF Auenneke	7 Dec 06
Dean of college	Date
For University Curriculum Committee	11107 Date
Action taken: approved as submitted a	pproved as modified

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both Both
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 386W
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
ENGINEERING DESIGN: THE METHODS (3)
Methods of engineering design, including project planning and management, project economics, data analysis and management, systems modeling and performance evaluation, and assessment of engineering impacts on social and cultural concerns. This course fulfills NAU's junior-level writing requirement. Prerequisite: EGR 286 and (ENG 105 or HON 190 or HON 191) with grade greater than or equal to C JWRT
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?
8. Is course an elective?
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments.
10. Does this change affect community college articulation? yes No No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? Yes no I
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

11. Only fill in what is	a. Proposed course subject /catalog number c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No I
changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
lf	
information is remaining the same,	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
leave the section	e. Proposed to cross-list with
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
	(max 100 characters including spaces)
•	g. Proposed short course title
	(max 30 characters including spaces)
•	h. Proposed catalog course description (max. 30 words, excluding requisites)
	1 South of the following requisites
cour	i. Proposed grading option: Letter grade Pass/Fail or Both
	(If both, the course may only be offered one way for each respective section.)
	j. May course be repeated for <i>additional</i> units? yes no j.1. If yes, maximum units allowed?
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Research
	Seminar Field Studies Independent Study Activity Supervision
	Proposed prerequisites (must be completed before)
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

Cle	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
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Chair of college curriculum committee	[#] Date [#]
It Jummeke	7 Dec 06
Dean of college	Date
For Committee use only	1114107
or University Curriculum Committee	Date
Action taken: approved as submitted approved as m	nodified

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both Both
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 418
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
HIGHWAY ENGINEERING (3)
Emphasizes highway geometric design, including capacity, human factors, safety, drainage, and specifications. Introduces highway construction, maintenance, and pavement design; transportation planning; and traffic engineering. 2 hrs. lecture, 3 hrs. lab. Prerequisite: (EGR 225 or CENE 225) and CENE 270 and CENE 383 with grades greater than or equal to C
If yes, list course Will this continue?
If required, for what academic plan/subplan? Civil Engr. If required, also submit Proposal for New Plan or Plan Change.
Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes No If yes, explain in the justification and provide supporting documentation from the affected departments.
0. Does this change affect community college articulation? yes No No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? Yes no I
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

11.	a. Proposed course subject /catalog number b. Proposed units
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No
what is changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
If information	d. Proposed to co-convene with . Date approved by UGC
is remaining the same,	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
leave the section	e. Proposed to cross-list with
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
•	f. Proposed long course title
_	(max 100 characters including spaces)
7	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.) j. May course be repeated for additional units? yes no j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)
	k. Please check ONE of the following that most appropriately describes the proposed course change(s): Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Seminar Field Studies Independent Study Activity Supervision
	l. Proposed prerequisites (must be completed before)
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

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Department Chair/ Unit Head (if appropriate)	Date
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Chair of college curriculum committee	Date "
LE Guenneke	7 Dec 06
UDean of college	Date
For Committee use only	1116107
For University Curriculum Committee	Date
Action taken: approved as submitted	approved as modified
Note: Submit original to associate provost's office. That office will provide copi	es to college dean, department chair, and Academic Information Office.

UNIVERSITY CURRICULUM COMMITTEE

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both Both
 Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 420
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
TRAFFIC STUDY AND SIGNAL (3)
Basic concepts including driver-roadway-vehicle system characteristics, traffic studies, capacity analysis, and traffic-control devices. Lab introduces traffic-engineering studies and signal-system operations, including computer applications. Coconvenes with CENE 541. 2 hrs. lecture, 3 hrs. lab. Prerequisite: (EGR 225 or CENE 225) and EGR 286 and one 300- or 400-level CENE-Civil and Environmental Engineering course
7. Is course currently cross-listed or co-convened? yes \(\sum \) no \(\subseteq \) If yes, list course \(\frac{CENE 541}{Yes} \) Will this continue? \(\frac{Yes}{Yes} \)
8. Is course an elective?
 9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes No If yes, explain in the justification and provide supporting documentation from the affected departments. 10. Does this change affect community college articulation? yes No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course	? Liberal Stud	lies 🗌	Diversity		Both 🗌
 Course change effective beginning of what (ex. Spring 2008, Summer 2008) <u>See effective</u> 	term and year? tive dates schedule.	Fall 20	007		
3. College CENS		4. Acade	mic Unit <u>CE</u>	NE	
5. Current course subject/catalog number	CENE 420	and the state of t	-		
6. Current catalog title, course description, and	units. (Copy and po	aste from <u>cu</u>	rrent on-line a	icademic cata	<u>ulog</u>).
TRAFFIC STUDY AND SIGNAL	(3)				
Basic concepts including driver-roady analysis, and traffic-control devices. I operations, including computer applicable. Prerequisite: (EGR 225 or CENE and Environmental Engineering cour	Lab introduces to cations. Coconverted 225) and EGR	raffic-eng enes with	ineering stu CENE 541.	dies and si 2 hrs. lect	ignal-system ure, 3 hrs.
7. Is course currently cross-listed or co-convened If yes, list course CEN Will this continue? Yes	d? yes ⊠ NE 541	no [
8. Is course an elective?			an?	<u></u>	
 9. Will other courses or academic units, be affect requirements, etc.) yes No If yes, explain in the justification and post 10. Does this change affect community college at If yes, explain how in the justification. 	o ⊠ rovide supporting do rticulation? yes	cumentation	from the affect	eted departme	
Is the course a Common Course as de If yes, has the change been approved	fined by your Articu	lation Task I	Force? yes	no no	⊠
If this course has been listed in the <u>Co</u> be left as is, or b If revised, how should it be revised?	o <u>urse Equivalency Gr</u> e revised? 🛛 ——	uide, should	that listing		

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

We have also developed a matrix of learning outcomes for each of our courses. A learning outcome associated with engineering design has been an element of this course, but is not included in the course description. The proposed revision corrects this omission.

Prerequisite for 300- or 400-level CENE course dropped.

	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
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Chair of college curriculum committee	Daté
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Dean of college	Date
For Committee use only	1/16/07
For University Curriculum Committee	Date

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both
Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 430
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
AIR POLLUTION CONTROLS DESIGN (3)
Design process and procedure for control of particulate and gaseous pollutants. Includes pollution prevention considerations. Prerequisite: ME 395 or CENE 380 with a grade greater than or equal to C
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?
8. Is course an elective?
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes
If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

Revised 8/06 CENE 430

11.	a. Proposed course subject /catalog number b. Proposed units
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No
what is changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
If	
information is remaining the same,	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
leave the section	e. Proposed to cross-list with
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
	(max 100 characters including spaces)
	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.) j. May course be repeated for additional units? yes no j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)
	yes
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Seminar Field Studies Independent Study Activity Supervision
	ME 395 with a grade greater than or equal
	l. Proposed prerequisites (must be completed before) to C
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent

Revised 8/06

Prerequisite of CENE 380 to be dropped as this course has been deleted.

Note that the second se	
	11/15/06
Department Chair, Unit Head (if appropriate)	Date
Mans A Williams	Dec 7,06
Chair of college curriculum committee	Dafe
s J. F. Juenneke	@ 7 Dec 06
Dean of college	Date
For Committee use only	1/11/07
For University Curriculum Committee	Date
Action taken: approved as submitted	approved as modified

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both
Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 433
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
HYDROLOGY AND FLOOD CONTROL (3)
Hydrologic design and analysis of drainage and flood-control systems. Hydrologic cycle components necessary for determining design flows. Computer modeling. Prerequisite or Corequisite: CENE 333 7. Is course currently cross-listed or co-convened? yes no
If yes, list course Will this continue?
8. Is course an elective?
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments.
10. Does this change affect community college articulation? yes No No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

Revised 8/06

11.	a. Proposed course subject /catalog number b. Proposed units
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog
what is	number that needs to be moved? Yes No No No Note that needs to be moved? Yes No No No Note that needs to be moved? Yes No
changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
If	
information	d. Proposed to co-convene with Date approved by UGC
is remaining the same,	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
leave the	a. Drawagad ta areas list with
section	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
blank.	(1 rease submit a single cross-tisted syllabus that will be used for all cross-tisted courses.)
	f. Proposed long course title
	(max 100 characters including spaces)
•	
	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
Uvd	lyologic design and analysis of dynings and flood control systems. Hydrologic system
_	Irologic design and analysis of drainage and flood-control systems. Hydrologic system ponents necessary for determining design flows. Development of computer tools for hydrologic
	lysis.
	4, 929.
	i. Proposed grading option: Letter grade Pass/Fail or Both
	(If both, the course may only be offered one way for each respective section.)
	j. May course be repeated for additional units? yes no no
	j.1. If yes, maximum units allowed?
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)
	yes no
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab
	Seminar Field Studies Independent Study Activity Supervision
	CENE 333 with a grade greater than or
	l. Proposed prerequisites (must be completed before) equal to C
	CENTE 222
	m. Proposed corequisites (must be completed with) CENE 333
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)
	Instructor consent Department consent No consent
	• — — (-

Revised 8/06

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

Prerequisite modified to reflect departmental requirement of C or better in all science and engineering prerequisites.

Corequisite unchanged, but repeated in Line 11-m to clarify that it has not been dropped.

reaction of the second of the	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
Mayor A Colorbando	Dec-7-2006
Chair of college curriculum committee	Date
& Limneke	7 Dec 06
Dean of college	Date
For Committee use only	1/10/07
For University Curriculum Committee	P Date V
Action taken: approved as submitted	approved as modified

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both	
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007	
3. College CENS 4. Academic Unit CENE	
5. Current course subject/catalog number CENE 434	
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).	
WATER AND WASTE-WATER UNITS DESIGN (3)	
Design-based environmental engineering course. Unites design of drinking water and waste-watreatment plants. Applies microbiology, water chemistry principles, and units of treatment-plant design techniques. Prerequisite: CENE 280 and CENE 333 with grades greater than or equal to	nt
7. Is course currently cross-listed or co-convened? yes no Mill this continue?	
8. Is course an elective?	
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments.	
10. Does this change affect community college articulation? yes \(\begin{align*}\) No \(\begin{align*}\) \(\begin{align*}\) If yes, explain how in the justification and provide supporting documentation from the affected institutions.	
Is the course a Common Course as defined by your Articulation Task Force? yes	
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?	

Revised 8/06 CENE 434

11.	a. Proposed course subject /catalog number b. Proposed units	
Only fill in what is	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No	
changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.	
If information	d. Proposed to co-convene with Date approved by UGC	
is remaining the same,	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)	_
leave the section blank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)	
	f. Proposed long course title	_
-	(max 100 characters including spaces)	
	g. Proposed short course title (max 30 characters including spaces)	
		-
	h. Proposed catalog course description (max. 30 words, excluding requisites)	
	gn of drinking water and waste-water treatment plants. Applies microbiology, water chemistry ciples and includes treatment-plant design techniques, disinfection, and reuse.	
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)	
	j. May course be repeated for <i>additional</i> units? yes no j.1. If yes, maximum units allowed?	
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no	
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):	
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research	
	Seminar Field Studies Independent Study Activity Supervision	!
	l. Proposed prerequisites (must be completed before)	-
	m. Proposed corequisites (must be completed with)	-
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent	

Revised 8/06

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

\mathcal{L}_{l}	
Kla-	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
greams of Wellebrand	Occ 7 2006
Chair of college curriculum committee	Daté 💆
1 Lithuenneke	7 Dec 06
Dean of college	Date
For Committee use only	1/110/07
For University Curriculum Committee	Date
Action taken: approved as submitted	approved as modified
Note: Submit original to associate provost's office. That office will provide copi	ies to college dean, department chair, and Academic Information Office.

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both Diversity
Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 436
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
STRUCTURAL STEEL DESIGN (3)
Tension members, compression members, flexural members, combined stresses, biaxial bending; heavy emphasis on connections; introduction to load and resistance factor design; computer applications. Prerequisite: CENE 376 with grade greater than or equal to C
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?
8. Is course an elective?
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes
If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, \(\sum \) or be revised? \(\sum \) If revised, how should it be revised?

Revised 8/06 CENE 436

11.	a. Proposed course subject /catalog number b. Proposed units
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No
what is changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
If information	d. Proposed to co-convene with Date approved by UGC
is remaining the same,	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
leave the section	e. Proposed to cross-list with
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
	(max 100 characters including spaces)
	and the second s
	g. Proposed short course title (max 30 characters including spaces)
	(max 50 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	sion members, compression members, flexural members, combined stresses, and introduction oad and resistance factor design and computer applications.
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)
	j. May course be repeated for additional units? yes no j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Seminar Field Studies Independent Study Activity Supervision
	l. Proposed prerequisites (must be completed before)
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent

Revised 8/06 CENE 436

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
Or more A M. Markerall	Due 7, 2006
Chair of college curriculum committee	Date **
L3 Juennehre	7 Dec 06
Dean of college	Date
For Committee use only	1/16/07
For University Curriculum Committee	Date
Action taken: approved as submitted	approved as modified

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both				
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007				
3. College CENS 4. Academic Unit CENE				
5. Current course subject/catalog number CENE 437				
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).				
WOOD BUILDING DESIGN (3)				
Building structures using masonry walls, wooden roofs, and wooden floor systems. Lateral load concepts, diaphragms, connections, shear walls and framing. Prerequisite: CENE 253 with grade greater than or equal to C				
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?				
8. Is course an elective?				
 Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments. 				
10. Does this change affect community college articulation? yes \(\sumsymbol{\substack}\) No \(\substack{\substack}\) If yes, explain how in the justification and provide supporting documentation from the affected institutions.				
Is the course a Common Course as defined by your Articulation Task Force? yes one of the If yes, has the change been approved by the Articulation Task Force? Yes one of the Image of the I				
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?				

Revised 8/06

11.	a. Proposed course subject /catalog number b. Proposed units	_	
0.1.60.	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog		
Only fill in what is	is If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog		
changing.			
Y.C.	number change.		
If information	d. Proposed to co-convene with Date approved by UGC		
is remaining	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)	_	
the same,			
leave the section	e. Proposed to cross-list with		
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)		
	f. Proposed long course title		
	(max 100 characters including spaces)	_	
_	(max 100 ominated moracing spaces)		
7	g. Proposed short course title		
	(max 30 characters including spaces)		
		_	
	h. Proposed catalog course description (max. 30 words, excluding requisites)		
ъ.			
	lding structures and wood system design. Lateral load concepts, diaphragms, connections,		
snea	ar walls and framing.	,-	
	i. Proposed grading option: Letter grade Pass/Fail or Both		
	(If both, the course may only be offered one way for each respective section.)		
	's country and country only on office of our way you chan a suppose of country.		
	j. May course be repeated for <i>additional</i> units? yes no		
	j.1. If yes, maximum units allowed?		
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)		
	yes no no		
•	b. Diagon about ONE of the fellowing that went any namicable describes the group and course about (a).		
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):		
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research]	
		7	
	Seminar Field Studies Independent Study Activity Supervision	j	
	1. Proposed prerequisites (must be completed before)		
	1. 1 Toposcu prerequisites (must be completed before)		
	m. Proposed corequisites (must be completed with)		
	Troposed corequisites (must be completed with)		
,	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)		
	Instructor consent Department consent No consent		

Revised 8/06 CENE 437

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. This course description reflects a change in content due to creation of a separate course in masonry design, permitting this course to focus on wood design. The course title was changed last year, but by an oversight the course description was not updated. The proposed changes reflect the current content of the course.

nea-	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
Edward A Millermon	Duc 7 2006
Chair of college curriculum committee	Date
15 Suemake	7 Dec 06
Dean of college	Date
For Committee use only	1/16/07
For University Curriculum Committee	Date
Action taken: approved as submitted	approved as modified
Note: Submit original to associate provost's office. That office will provide co	pies to college dean department chair and Academic Information Office.

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course?	Liberal Studies	; 🔲	Diversity	Both 🔲
 Course change effective beginning of what term (ex. Spring 2008, Summer 2008) <u>See effective description</u> 	and year? ates schedule.	_Fall 20	007	
3. College CENS		4. Acader	nic Unit <u>CENE</u>	
5. Current course subject/catalog number	ENE 438			
6. Current catalog title, course description, and unit	s. (Copy and paste	? from <u>cu</u> i	rent on-line academi	ic catalog).
REINFORCED CONCRETE DESIGN	(3)			
Working stress and strength design conce combined footings. Computer applications equal to C or Corequisite: CENE 376	pts, beams, col s. Prerequisite:	umns, s : CENE	labs, retaining w 376 with grade g	alls, single and reater than or
7. Is course currently cross-listed or co-convened? If yes, list course Will this continue?	yes []	no 🔀	3	
8. Is course an elective?	for an academic pla <u>Civil Engr.</u> Plan or Plan Chang		n? 🛛	-
 Will other courses or academic units, be affected by requirements, etc.) yes no If yes, explain in the justification and provide 	1×1			ertments.
 Does this change affect community college articula If yes, explain how in the justification and p 	tion? yes [provide supporting	□ N document	Jo ⊠ ation from the affecte	ed institutions.
Is the course a Common Course as defined be If yes, has the change been approved by the	Articulation Task l	Force? Y	es no [no 🛭
If this course has been listed in the <u>Course E</u> be left as is, or be revised. If revised, how should it be revised?	<i>quivalency Guide</i> , ed?	should th	at listing	

Revised 8/06

11.	a. Proposed course subject /catalog number b. Proposed units
Only fill in what is changing.	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
If	number change.
information is remaining	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
the same, leave the section	e. Proposed to cross-list with
blank,	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
_	(max 100 characters including spaces)
7	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
Wor Com	king stress and strength design concepts, beams, columns, slabs, retaining walls, and footings.
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)
	j. May course be repeated for <i>additional</i> units? yes no j.l. If yes, maximum units allowed?
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Seminar Field Studies Independent Study Activity Supervision
	1. Proposed prerequisites (must be completed before)
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

	11/15/06
Department Chair/ Unit Head (If appropriate)	Date
Chair of college curriculum confinitee	Det 7 2006
sommer of confect curricularity communities	Date
Dean of college	7 Dec 06
real of conege	Date
For Committee use only or University Curriculum Committee	1/16/07
or University Curriculum Committee	Date
ction taken: approved as submitted	approved as modified

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both
 Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 476
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
EGR DESIGN PROC LAB (1)
Involves forming design teams, selecting projects for CENE 486C with sponsor interaction, completing a project proposal, and having it accepted by the sponsor. Prerequisite: CENE 386W or CENE 386 with grade greater than or equal to C
7. Is course currently cross-listed or co-convened? yes no Mill this continue?
If required, for what academic plan/subplan? Civil Engr., Environmental Engr. If required, also submit Proposal for New Plan or Plan Change.
Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments.
0. Does this change affect community college articulation? yes No No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no Minimum
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? Revise course title.
ACTION COURSE URIC.

11.	a. Proposed course subject /catalog number	b. Proposed units	
Only fill in	c. If subject/catalog number change, is the	ere a course fee attached to the current subject/catalog	
what is	number that needs to be moved? Yes No		
changing.	number change.	n for Instructional Fees indicating the new course subject/catalog	
If			
information	d. Proposed to co-convene with	Date approved by UGC	
is remaining the same, leave the	(Must be approved by UGC prior to bringing to	UCC. Both course syllabi must be presented.)	
section blank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that	will be used for all cross-listed courses.)	
	f. Proposed long course title ENGIN	EERING DESIGN: CAPSTONE PREPARATION	
_	(max 100 characters including spaces)		
7	g. Proposed short course title		
	(max 30 characters including spaces)	ENGR DESIGN: CAPSTONE PREP	
	h. Proposed catalog course description (max. 30 wo	ords, excluding requisites)	
Invo proj	olves forming design teams, selecting project proposal accepted by the sponsor. Mu	ects with sponsor interaction, and completing a st be taken in same academic year as CENE 486C.	
	i. Proposed grading option: Letter grade Profile (If both, the course may only be offered one was	-	
	 j. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for additional yes no 	yes no no units in the same term? (ex. BIO 300, PES 100)	
	k. Please check ONE of the following that most ap	propriately describes the proposed course change(s):	
	Lecture w/0 unit embedded lab Lectu	re only Lab only Clinical Research Research	
	Seminar Field Studies Inc	lependent Study Activity Supervision	
·	1. Proposed prerequisites (must be completed before)	
	m. Proposed corequisites (must be completed with)		
	n. If course has no requisites, will all sections of the Instructor consent	c course require: (If course has pre or co requisite, skip to question 12) Department consent No consent	

The course title has been confusing and did not really reflect the purpose of the course, which is to prepare students for their capstone course. The modification to the course title addresses this directly. The description was modified to clarify for students that they needed to take this course in the same academic year as the capstone course.

- 1.	11/15/06
Department Chair/ Unit Head (if appropriate)	Date
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hair of college curriculum committee	Date
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ean of college	Date
For Committee use only	1114/07
or University Curriculum Committee	Date
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PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies \(\sumeq \) Diversity \(\sumeq \) Both \(\sumeq \)
 Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Current course subject/catalog number CENE 486C
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
ENGINEERING DESIGN (3)
Involves design methodology and decision making and preparing team design projects that culminate in oral and written reports. Must be taken in the year in which you graduate. 2 hrs. lecture, 3 hrs. lab. Prerequisite: (CENE 386W or CENE 386) and CENE 476 CAP
7. Is course currently cross-listed or co-convened? yes no Mill this continue?
If required, for what academic plan/subplan? Civil Engr., Environmental Engr. If required, also submit Proposal for New Plan or Plan Change.
Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes \(\sum \no \omega \) If yes, explain in the justification and provide supporting documentation from the affected departments.
0. Does this change affect community college articulation? yes No No If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? Yes no I
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

11.	a. Proposed course subject /catalog number
	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog
Only fill in what is	number that needs to be moved? Yes No
changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/octales
	number change.
If information	d Dunnandte
is remaining	d. Proposed to co-convene with Must be approved by UGC
the same,	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
leave the section	e. Proposed to cross-list with
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
_	(max 100 characters including spaces)
7	a Danier 1.1
	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	words, excluding requisites)
	i. Proposed grading option: Letter grade Pass/Fail or Both
	(If both, the course may only be offered one way for each respective section.)
	to the way for each respective section.)
	j. May course be repeated for additional units? yes no no
	j.1. If yes, maximum units allowed?
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)
	yes no
	k Please check ONE of the following that were
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Seminar Field Studies Independent Study Activity Supervision
	(CENE 296W on CENE 296) A CONTR
	1. Proposed prerequisites (must be completed before) (CENE 386W or CENE 386) and CENE 476 with grades greater than or equal to C
	1. Proposed prerequisites (must be completed before) 476 with grades greater than or equal to C
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)
	Instructor consent Department consent No consent No consent
	- I to consent

Prerequisite has been modified to reflect departmental requirement for minimum grade of C or better in requisite courses.

de la companya dela	
	11/15/06
Department Chair/ Unit Head (if appropriate)	Date (2/4/06
Chair of college curriculum committee Chair of college curriculum committee	7 Dec 06
For Committee use only	Date
For University Curriculum Committee Action taken: approved as submitted	Date approved as modified
Note: Submit original to associate provost's office. That office will provide co	•

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies \(\sumeq \) Diversity \(\sumeq \) Both \(\sumeq \)
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College Engineering and Natural Sciences 4. Academic Unit Mathematics and Statistics
5. Current course subject/catalog number STA 473C
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
STA 473C INTRODUCTION TO MATHEMATICAL STATISTICS I (3)
Elementary combinatorial probability theory, random variables, probability distributions, and moments. Prerequisite: MAT 137 with grade greater than or equal to C CAP
7. Is course currently cross-listed or co-convened? yes no Mill this continue?
8. Is course an elective? or required for an academic plan/subplan? BS- Mathematics and BS-Mathematics (Extended Major) If required, also submit Proposal for New Plan or Plan Change.
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes on o other presents in the justification and provide supporting documentation from the affected departments.
Environmental Science is affected but the change is only to add an alternate course as a prerequisite.
10. Does this change affect community college articulation? yes no no If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? yes no
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

11.	a. Proposed course subject /catalog number b. Proposed units				
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog				
what is	number that needs to be moved? Yes No				
changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.				
f					
nformation	d. Proposed to co-convene with Date approved by UGC				
s remaining	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)				
he same, eave the					
ection	e. Proposed to cross-list with				
lank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)				
	f. Proposed long course title				
	(max 100 characters including spaces)				
	Company of the control of the contro				
7	g. Proposed short course title				
	(max 30 characters including spaces)				
	h. Proposed catalog course description (max. 30 words, excluding requisites)				
	i. Proposed grading option: Letter grade Pass/Fail or Both				
	(If both, the course may only be offered one way for each respective section.)				
	o o o o o o o o o o o o o o o o o o o				
	j. May course be repeated for additional units? yes no				
	j.1. If yes, maximum units allowed?				
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)				
	yes no				
	In Diagraph on the Color of the				
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):				
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Research				
	Seminar Field Studies Independent Study Activity Supervision				
	1. Proposed prerequisites (must be completed before)				
	MAT 238 with grade greater than or equal to C				
	m. Proposed corequisites (must be completed with)				
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)				
	Instructor consent Department consent No consent				
	1 TO COMOUNT				

The increase in prerequisite from Calculus II to Calculus III will ensure that all students have had some familiarity with double integrals. In reality, all students requiring STA 473C must also take MAT 238 and almost all currently enrolled in STA 473C have had MAT 238. The change provides a better guideline for the sequencing of courses.

13. Approvals	
ganet M. Mc Shane	20 NN 2016
Department Chair Unit Head (if appropriate)	Date 18-07-2006
Chair of college curriculum committee A Hurnelee	Date 7 Dec 06
For Committee use only	Date
For University Curriculum Committee Action taken: approved as submitted	approved as modified

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

1. College	Social and I Sciences	Behavioral	2. Academic Unit	Applied Indigenous Studies
3. Academic Plan Name	Native Ame Minor	rican Studies	4. Subplan (if applicable)?	
5. Effective Da	te <u>FA</u>	LL 2007		
6. Is this proposal for a: (Please refer to Plan and Subplan		☐ New Plan	🔀 Plan Change	Plan Deletion
definitions)	ongrem	New Subplan	Subplan Change	Subplan Deletion

For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the *current* on line academic catalog:

(http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm)

Be sure you include all catalog text that pertains to this plan change

For New Plans, leave this column blank.

To complete this 18-unit minor, you must earn a grade of C or better in each of the following:

- AIS 101 and 202 (6 units)
- 12 units from AIS 201 and 210; ANT 303, 306, 351, 406, 459, and 517;
 BME 570; ENG 345; HIS 280 and 486; MUS 365; NAV 101, 102, 201, 202, 303, 304W, 405, and 406; REL 380 and 482C; and SOC 315 and other courses approved by the department chair

Be aware that some of the courses required for your minor may have prerequisites that you must also take. Check the courses in the appropriate subject.

Please note that you cannot take this minor if you major in applied indigenous studies. For further information, contact the plan advisor.

Click here for more information about Native American <u>courses</u>.

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)

We designed this minor to provide you with a multidisciplinary understanding of Native American histories, religions, and cultures in the past and present. For additional information, contact the plan advisor.

To complete this 18-unit minor, you must earn a grade of C or better in each of the following:

- AIS 101 and 202 (6 units)
- 12 units from AIS 201, 210, 350, 450,
 470; ANT 205, 303, 306, 351, 406, 459,
 or 517; ARH 361, 365, 440*, BME 570;
 ENG 345*; HIS 280, 293, 413, 415 or
 486; MUS 365; NAV 101, 102, 201, 202,
 303, 304W, 405, or 406; REL 380 or
 482C; SOC 315; WST 394* or other
 courses approved by the department chair

* Special Topics related to Native American Studies

Be aware that some of the courses required for your minor may have prerequisites that you must also take. Check the courses in the appropriate subject.

Please note that you cannot take this minor if you major in applied indigenous studies. For further information, contact the plan advisor.

Click here for more information about Native American <u>courses</u>.

3.	For undergraduate plans, will this requirement be a student individualized plan*? 🛛 no	☐ yes
	*A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAiLS focu	s, for which
	coursework requirements are established by the student in consultation with the advisor.	

If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.
 9. For undergraduate plans, will a milestone** be used to: a. verify satisfactory completion of a non course requirement. b. indicate admission to a major. c. will not be used.
**A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status. If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.
10. Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage -
http://www4.nau.edu/assessment/main/degree/degree.htm). There are no changes to the assessment models for Applied Indigenous Studies.
11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes. The AIS faculty has revisited the Native American Studies minor and want to include a multidisciplinary understanding of Native American histories, religions, and cultures. A review of the current university catalog and discussion with faculty have generated additional courses to be added to the current list for the Native American Studies minor.
12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied? No
13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or
enrollment at NAU? If so, attach supporting documentation from the affected departments/units and college dean. No
14. Will present library holdings support this academic plan/subplan? Yes
Certifications Otherwise 28, 200 S
Department Chair/ Unit Head (if appropriate) Date
Chair of college curriculum committee Date
Dean of college Date
For committee use only For University Curriculum Committee Date
Pare Date
Action taken:
Note: Submit original to associate provost's office. That office will provide copies to the college dean, department chair, and Academic

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

College of Social and Behavioral Sciences		2. Academic Unit	Applied Indigenous Studies	
3. Academic Plan Name	· · · · · · · · · · · · · · · · · · ·		4. Subplan (if applicable)?	Emphasis Areas
5. Effective Da	te <u>FALL</u>	2007		
6. Is this proposal for a : (Please refer to Plan and Subplan		New Plan	⊠ Plan Change	Plan Deletion
<u>definitions</u>)		New Subplan	Subplan Change	Subplan Deletion

For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the *current* on line academic catalog:

(http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm)

Be sure you include all catalog text that pertains to this plan change

For New Plans, leave this column blank.

B.S. Applied Indigenous Studies (extended major) To earn this degree, you must complete at least 120 units of coursework, which we describe in the sections that follow:

 at least 35 units of liberal studies requirements.

Be aware that you may not use courses with an AIS prefix to satisfy these liberal studies requirements.

- at least 69 units of major requirements
- elective courses, if needed, to reach an overall total of at least 120 units

MAJOR REQUIREMENTS

You must take at least the following 69 units with a grade of C or better in each course:

- required core courses: AIS 101, 201, 202, 210, 304, 350, 404, and 408 (24 units)
- AIS 301W, which meets NAU's junior writing requirement (3 units)
- one of the following, chosen with your advisor's approval: ECO 201, CJ 355, COM 305, JLS 440C, NUR 390, POS 303, PSY 230, SS 355, SOC 355W and 365, STA 270, and CTE 340W (3-4 units)
- 12 units from AIS 232, 450, and 470; AIS 320 or POS 320; ANT 205, 301, 303, 306, 307, 351, 365, 406, 459, and 460; ARH 145; BIO 479; BME 570; CJ 415; COM 301; ECO 425; ES 191, 215, and 356; FOR 270 and 370; HIS 280, 293, 380, 381, 413, 414, 415, 486, and 488; NAV 101, 102, 201, 202, 303, 304W, 311, 312, 321, 405, and 406; REL 201, 380, and 482C; SC 323 and 477; SOC 315; and other courses approved by the department chair, with no more than 4 units in any one course prefix
- AIS 490C, which meets NAU's senior capstone requirement (3 units)
- 24-27 units in one of the following crossdisciplinary emphases

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)

B.S. Applied Indigenous Studies (extended major)

To earn this degree, you must complete at least 120 units of coursework, which we describe in the sections that follow:

- at least 35 units of liberal studies requirements. Be aware that you may not use courses with an AIS prefix to satisfy these liberal studies requirements.
- at least 54-55 units of major requirements
- elective courses, if needed, to reach an overall total of at least 120 units

MAJOR REQUIREMENTS

You must take at least the following 54-55 units with a grade of C or better in each course:

- required core courses: AIS 101, 201, 202, 210, 304, 350, 404, and 408 (24 units)
- AIS 301W, which meets NAU's junior writing requirement (3 units)
- one of the following, chosen with your advisor's approval: ECO 201, CJ 355, COM 305, JLS 440C, NUR 390, POS 303, PSY 230, SS 355, SOC 355W and 365, STA 270, and CTE 340W (3-4 units)

12 units from AIS 232, 450, and 470; AIS 320 or POS 320; ANT 205, 301, 303, 306, 307, 351, 365, 406, 459, and 460; ARH 145; BIO 479; BME 570; CJ 415; COM 301; ECO 425; ES 191, 215, and 356; FOR 270 and 370; HIS 280, 293, 380, 381, 413, 414, 415, 486, and 488; NAV 101, 102, 201, 202, 303, 304W, 311, 312, 321, 405, and 406; REL 201, 380, and 482C; SC 323 and 477; SOC 315; and other courses approved by the department chair, with no more than 4 units in any one course prefix

- AIS 490C, which meets NAU's senior capstone requirement (3 units)
- 21 units in one of the following cross-disciplinary emphases

Applied Indigenous Cultural Resource Management Emphasis

For this emphasis, you take the following 25 units with a grade of C or better in each course:

- AIS 232 (3 units)
- ANT 102, 250, 351, 359W, 365, 459, and 460 (22 units)

Applied Indigenous Economic Development Emphasis

For this emphasis, you take the following 27 units with a grade of C or better in each course:

- ECO 284, 285, 325, 356, and 425 (15 units)
- ACC 255, FIN 303, MGT 303, and MKT 303 (12 units)

Applied Indigenous Environmental Management Emphasis

For this emphasis, you take the following 24 units with a grade of C or better in each course:

- PL 302, POS 359, and ECO 325 (9 units)
- 15 units from PL 402W, POS 320 or AIS 320, and POS 224, 250, 325, 326, 327, 344, 345, and 445

Applied Indigenous Environmental Science Emphasis For this emphasis, you take the following 25 units with a grade of C or better in each course:

- AIS 380 (3 units)
- ENV 230, 280, 330, and 385W (16 units)
- FOR 230 (3 units)
- POS 359 (3 units)

Applied Indigenous Knowledge Emphasis For this emphasis, you take the following 24 units with a grade of C or better in each course:

- FOR 230, 270, and 370; and AIS 450 and 470 (15 units)
- 9 units from FOR 222, 240, 282, and 382;
 HUM 373; PL 302; POS 344 and 359; and REL 380 and 391

Applied Indigenous Policy Administration Emphasis For this emphasis, you take the following 27 units with a grade of C or better in each course:

- AIS 320; POS 224, 241, and 250; and ECO 425 (15 units)
- PL 201 or PR 272 (3 units)
- 9 units from POS 316, 317, 325, 326, 344, 345, 359, and 455 and CJ 101, and 415

Applied Indigenous Cultural Resource Management Emphasis

For this emphasis, you take the following 21 units with a grade of C or better in each course:

- AIS 232 (3 units)
- **18 units from** ANT 102, 250, 351, 359W, 365, 459, or 460

Applied Indigenous Economic Development Emphasis For this emphasis, you take the following 21 units with a grade of C or better in each course:

- ECO 284, 285, 325, 356-and 425 (12 units)
- ACC 255, FIN 303 and MGT 303 and MKT-303
 (9 units)

Applied Indigenous Environmental Management Emphasis

For this emphasis, you take the following 21 units with a grade of C or better in each course:

- ECO 325, ENV 181, PL-302 and POS 359 (9 units)
- 12 units from AIS 320 or POS 320, PL 302, or
 402W, POS 224, 250, 325, 326, 327, 344, or 345 and 445

Applied Indigenous Environmental Science Emphasis For this emphasis, you take the following 21 units with a grade of C or better in each course:

- AIS 380 (3 units)
- 12 units from ENV 181, 230, 280, 330, or 385W
- FOR 230 (3 units)
- POS 359 (3 units)

Applied Indigenous Knowledge Emphasis
For this emphasis, you take the following 21 units with a
grade of C or better in each course:

- FOR 230, 270, and 370; and AIS 450 and 470 (15 units)
- 6 units from FOR 222, 240, 282, 380 or 382, HUM 373; PL 302, POS 344 or 359, REL 380 or 391

Applied Indigenous Policy Administration Emphasis For this emphasis, you take the following 21 units with a grade of C or better in each course:

- AIS 320; POS 224, 241, and 250; and ECO 425 (15 units)
- PL 201 or PR 272 (3 units)
- **3 units from** POS 316, 317, 325, 326, 344, 345, 359, or 455, CJ 101, **375**, **376** or 415

Applied Indigenous Politics and Movements Emphasis For this emphasis, you take the following 24 units with a grade of C or better in each course:	Applied Indigenous Politics and Movements Emphasis For this emphasis, you take the following 21 units with a grade of C or better in each course:
 PL 302, POS 359, and ECO 325 (9 units) 15 units from PL 306, POS 320 or AIS 320, and POS 250, 314, 344, 356, 361, 455, and 480 	• PL 302, POS 359, and ECO 325 (9 units) • 12 units from PL 306, POS 320 or AIS 320, POS 250, 314, 344, 356, 361, 455, or 480
 8. For undergraduate plans, will this requirement be a st *A Student Individualized Plan is an academic requirement that va coursework requirements are established by the student in consulta If yes, the academic unit listed at the top of this form information about each student's individual requirement. 9. For undergraduate plans, will a milestone** be used 	ries by student, such as the 15-unit BAiLS focus, for which ution with the advisor. hereby takes responsibility for providing complete ents for the degree audit system.
 a. verify satisfactory completion of a non cour b. indicate admission to a major. c. will not be used. 	se requirement. HRM 800-hour work experience requirement or admission to Business Major status ereby takes responsibility for maintaining the
10. Please list the Learning Outcomes of the Plan/Subp	
•	ee.htm) There are no changes to the assessment models
Reducing the number of required courses for	assessments of student learning prompted proposed changes. or the extended major from 25 to 21 units for all the
not diminish the breadth of the overall coursew	of new courses and elimination of other courses that do
The AIS faculty is revising the assessment plan	±
13. Will this academic plan/subplan affect other majors	, liberal studies course offerings, plans/subplans, curricula, or
enrollment at NAU? If so, attach supporting documentation from the afferment of the supporting documentation from the suppor	ected departments/units and college dean.
No	•
14. Will present library holdings support this academic Yes	pian/subpian?
Certifications Chancer of Ly	Wovenber 28 2006
Department Chair/ Unit Head (if appropriate)	Date
Chair of college curriculum committee	Date
Dean of college	Date
For committee use only	1/16/07
For University Curriculum Committee Action taken:approved as submitted	Date approved as modified
Note: Submit original to associate provost's office. That office Information Office after approval.	will provide copies to the college dean, department chair, and Academic

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

College of Social and Behavioral Sciences 3. Academic Plan Name B.A. Applied Indigenous Studies (extended major)		2. Academic Unit	Applied Indigenous Studies Emphasis Areas
		4. Subplan (if applicable)?	
5. Effective Da	te FALL 2007		
6. Is this propo		🛛 Plan Change	Plan Deletion
definitions)	New Subplan	Subplan Change	Subplan Deletion

For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the *current* on line academic catalog:

(http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm)

Be sure you include all catalog text that pertains to this plan change

For New Plans, leave this column blank.

B.A. Applied Indigenous Studies (extended major) To earn this degree, you must complete at least 120 units of coursework, which we describe in the sections that follow:

- at least 35 units of liberal studies requirements. Be aware that you may not use courses with an AIS prefix to satisfy these liberal studies requirements.
- at least 66 units of major requirements
- at least 16 units of language requirements
- elective courses, if needed, to reach an overall total of at least 120 units

Major Requirements

You must take at least the following 66 units with a grade of C or better in each course:

- required core courses: AIS 101, 201, 202, 210, 304, 350, 404, and 408 (24 units)
- AIS 301W, which meets NAU's junior writing requirement (3 units)
- one of the following, chosen with your advisor's approval: ECO 201, CJ 355, COM 305, JLS 440C, NUR 390, POS 303, PSY 230, SS 355, SOC 355W and 365, STA 270, and CTE 340W (3-4 units)
- 9 units from AIS 232, 450, and 470; AIS 320 or POS 320; ANT 205, 301, 303, 306, 307, 351, 365, 406, 459, and 460; ARH 145; BIO 479; BME 570; CJ 415; COM 301; ECO 425; ES 191, 215, and 356; FOR 270 and 370; HIS 280, 293, 380, 381, 413, 414, 415, 486, and 488; NAV 101, 102, 201, 202, 303, 304W, 311, 312, 321, 405, and 406; REL 201, 380, and 482C; SC 323 and 477; SOC 315; and other courses approved by the department chair, with no more than 4 units in any one course prefix
- AIS 490C, which meets NAU's senior capstone requirement (3 units)
- 24-27 units in one of the following crossdisciplinary emphases

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)

B.A. Applied Indigenous Studies (extended major)
To earn this degree, you must complete at least 120 units of coursework, which we describe in the sections that follow:

- at least 35 units of liberal studies requirements.
 Be aware that you may not use courses with an AIS prefix to satisfy these liberal studies requirements.
- at least 54-55 units of major requirements
- at least 16 units of language requirements
- elective courses, if needed, to reach an overall total of at least 120 units

Major Requirements

You must take at least the following 54-55 units with a grade of C or better in each course:

- required core courses: AIS 101, 201, 202, 210, 304, 350, 404, and 408 (24 units)
- AIS 301W, which meets NAU's junior writing requirement (3 units)
- one of the following, chosen with your advisor's approval: ECO 201, CJ 355, COM 305, JLS 440C, NUR 390, POS 303, PSY 230, SS 355, SOC 355W and 365, STA 270, and CTE 340W (3-4 units)
- 9 units from AIS 232, 450, and 470; AIS 320 or POS 320; ANT 205, 301, 303, 306, 307, 351, 365, 406, 459, and 460; ARH 145; BIO 479; BME 570; CJ 415; COM 301; ECO 425; ES 191, 215, and 356; FOR 270 and 370; HIS 280, 293, 380, 381, 413, 414, 415, 486, and 488; NAV 101, 102, 201, 202, 303, 304W, 311, 312, 321, 405, and 406; REL 201, 380, and 482C; SC 323 and 477; SOC 315; and other courses approved by the department chair, with no more than 4 units in any one course prefix
- AIS 490C, which meets NAU's senior capstone requirement (3 units)
- 21 units in one of the following cross-disciplinary emphases

Applied Indigenous Cultural Resource Management Emphasis

For this emphasis, you take the following 25 units with a grade of C or better in each course:

- AIS 232 (3 units)
- ANT 102, 250, 351, 359W, 365, 459, and 460 (22 units)

Applied Indigenous Economic Development Emphasis

For this emphasis, you take the following 27 units with a grade of C or better in each course:

- ECO 284, 285, 325, 356, and 425 (15 units)
- ACC 255, FIN 303, MGT 303, and MKT 303 (12 units)

Applied Indigenous Environmental Management Emphasis

For this emphasis, you take the following 24 units with a grade of C or better in each course:

- PL 302, POS 359, and ECO 325 (9 units)
- 15 units from PL 402W, POS 320 or AIS 320, and POS 224, 250, 325, 326, 327, 344, 345, and 445

Applied Indigenous Environmental Science Emphasis For this emphasis, you take the following 25 units with a grade of C or better in each course:

- AIS 380 (3 units)
- ENV 230, 280, 330, and 385W (16 units)
- FOR 230 (3 units)
- POS 359 (3 units)

Applied Indigenous Knowledge Emphasis
For this emphasis, you take the following 24 units
with a grade of C or better in each course:

- FOR 230, 270, and 370; and AIS 450 and 470 (15 units)
- 9 units from FOR 222, 240, 282, and 382;
 HUM 373; PL 302; POS 344 and 359; and REL 380 and 391

Applied Indigenous Policy Administration Emphasis For this emphasis, you take the following 27 units with a grade of C or better in each course:

- AIS 320; POS 224, 241, and 250; and ECO 425 (15 units)
- PL 201 or PR 272 (3 units)
- 9 units from POS 316, 317, 325, 326, 344, 345, 359, and 455 and CJ 101, and 415

Applied Indigenous Cultural Resource Management Emphasis

For this emphasis, you take the following 21 units with a grade of C or better in each course:

- AIS 232 (3 units)
- **18 units from** ANT 102, 250, 351, 359W, 365, 459, or 460

Applied Indigenous Economic Development Emphasis For this emphasis, you take the following 21 units with a grade of C or better in each course:

- ECO 284, 285, 325, 356 and 425 (**12 units**)
- ACC 255, FIN 303 and MGT 303 and MKT-303 (9 units)

Applied Indigenous Environmental Management Emphasis

For this emphasis, you take the following 21 units with a grade of C or better in each course:

- ECO 325, ENV 181, PL 302 and POS 359 (9 units)
- 12 units from AIS 320 or POS 320, PL 302, or 402W, POS 224, 250, 325, 326, 327, 344, or 345 and 445

Applied Indigenous Environmental Science Emphasis For this emphasis, you take the following 21 units with a grade of C or better in each course:

- AIS 380 (3 units)
- 12 units from ENV 181, 230, 280, 330, or 385W
- FOR 230 (3 units)
- POS 359 (3 units)

Applied Indigenous Knowledge Emphasis
For this emphasis, you take the following 21 units with a
grade of C or better in each course:

- FOR 230, 270, and 370; and AIS 450 and 470 (15 units)
- 6 units from FOR 222, 240, **282**, **380** or 382, **HUM 373**; PL 302, POS 344 or 359, REL 380 or 391

Applied Indigenous Policy Administration Emphasis For this emphasis, you take the following 21 units with a grade of C or better in each course:

- AIS 320; POS 224, 241, and 250; and ECO 425 (15 units)
 - PL 201 or PR 272 (3 units)
- 3 units from POS 316, 317, 325, 326, 344, 345, 359, or 455, CJ 101, 3/5, 376 or 415

Applied Indigenous Politics and Movements Emphasis

For this emphasis, you take the following 24 units with a grade of C or better in each course:

- PL 302, POS 359, and ECO 325 (9 units)
- 15 units from PL 306, POS 320 or AIS 320, and POS 250, 314, 344, 356, 361, 455, and 480

Language Requirement

You must demonstrate proficiency in a language other than English that is equivalent to four terms of university coursework in the same language. You may satisfy this requirement by taking language courses or by testing out of all or part of it by taking CLEP exams arranged by NAU's Counseling and Testing Center. Click here for more information.

Because these courses are available at NAU, we suggest that you fulfill this requirement with either Navajo or Spanish, depending on your career aspirations.

General Electives

Additional coursework is required, if, after you have met the previously described requirements, you have not yet completed a total of 120 units of credit.

You may take these remaining courses from any academic areas, using these courses to pursue your specific interests and goals. We encourage you to consult with your advisor to select the courses that will be most advantageous to you. (Please note that you may also use prerequisites or transfer credits as electives if they weren't used to meet major, minor, or liberal studies requirements.)

Click here for more information about our Applied Indigenous Studies Courses and Faculty.

Applied Indigenous Politics and Movements Emphasis For this emphasis, you take the following 21 units with a grade of C or better in each course:

- PL 302, POS 359, and ECO 325 (9 units)
- **12 units from** PL 306, POS 320 or AIS 320, POS 250, 314, 344, 356, 361, 455, or 480

Language Requirement

You must demonstrate proficiency in a language other than English that is equivalent to four terms of university coursework in the same language. You may satisfy this requirement by taking language courses or by testing out of all or part of it by taking CLEP exams arranged by NAU's Counseling and Testing Center. Click here for more information.

Because these courses are available at NAU, we suggest that you fulfill this requirement with either Navajo or Spanish, depending on your career aspirations.

General Electives

Additional coursework is required, if, after you have met the previously described requirements, you have not yet completed a total of 120 units of credit.

You may take these remaining courses from any academic areas, using these courses to pursue your specific interests and goals. We encourage you to consult with your advisor to select the courses that will be most advantageous to you. (Please note that you may also use prerequisites or transfer credits as electives if they weren't used to meet major, minor, or liberal studies requirements.)

Click here for more information about our Applied Indigenous Studies Courses and Faculty.

8. For undergraduate plans, will this requirement be a student individualized plan*? on yes *A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAiLS focus, for which coursework requirements are established by the student in consultation with the advisor. If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.
9. For undergraduate plans, will a milestone** be used to: a. verify satisfactory completion of a non course requirement. b. indicate admission to a major. c. will not be used. **A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status. If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.
10. Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage -

http://www4.nau.edu/assessment/main/degree/degree.htm). There are no changes to the assessment models

for Applied Indigenous Studies.

11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes. Reducing the number of required courses for the extended major from 25 to 21 units for all the emphasis areas are justified with the addition of new courses and elimination of other courses that do not diminish the breadth of the overall coursework requirement.

The AIS faculty is revising the assessment plan for the Plan/Subplan this academic year.

12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?
No

13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU?

If so, attach supporting documentation from the affected departments/units and college dean. No

14. Will present library holdings support this academic plan/subplan?
Ves

Certifications Change Change	November 28, 2006
Department Chair/ Unit Head (if appropriate)	Date
Chair of college curriculum committee	11-3 Date
Dean of college	Date
For committee use only	1116/07
For University Curriculum Committee	Date
Action taken:approved as submittedappro	oved as modified
Note: Submit original to associate provost's office. That office will provide of	copies to the college dean, department chair, and Academic

Information Office after approval.

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

	1. College	SBS (COM	0	2. Academi	c Unit _Jo	urnalsim	
	3. Academic Plan Name	BS J Ed		4. Subplan (if applic	able)?		· ·
	5. Effective Da	ate Sp	oring 2007				
	6. Is this propo	osal for a :	New Plan	Plan Chang	ge	Plan	Deletion P
			New Subplan	☐ Subplan C	hange	Subp	lan Deletion
					• .	2	and the state of t
7.	this column. P from the curre (http://www4.nau.ed Be sure you in this plan chang	lease copy an ent on line aca hu/aio/AcademicCa aclude all cata ge	e existing catalog text in d paste the text directly demic catalog: talog/academiccatalogs.htm) log text that pertains to	Show the proposed changed the changes, to changing. (Describe the changed rematch those used in the if the units are not totale adjust them accordingly)	differentia equirement left column ed correctly	te from what s under headii Please be av	is not ngs that vare that
	For New Plans	s, leave this co	lumn blank.				
		,				egga ^l t e	enter en
							•
:							
	*A Student Ind coursework red If yes, the a	lividualized Plan i quirements are est cademic unit l	will this requirement be a s s an academic requirement that v ablished by the student in consult isted at the top of this form adent's individual requirem	aries by student, such as the 13-t lation with the advisor. hereby takes responsibili	ty for provi	us, for which	
	a. ve b. inc c. wi **A Milestone is If yes, the act	rify satisfactor licate admission ll not be used. used to record not ademic unit lis	will a milestone** be used ry completion of a non cou on to a major. necourse requirements, such as the sted at the top of this form vidual student records up t	rse requirement. HRM 800-hour work experience hereby takes responsibility	e requirement y for mainta	or admission to B ining the	susiness Major status.

UNIVERSITY CURRICULUM COMMITTEE

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

1. College <u>CENS</u>		2. Academic Unit	Biological Sciences
3. Academic Plan Name B.S. Biology		4. Subplan (if applicable)?	
5. Effective Date FALL	2007_		
6. Is this proposal for a:	New Plan	XX Plan Change	☐ Plan Deletion
(Please refer to Plan and Subplan definitions)	New Subplan	Subplan Change	☐ Subplan Deletion

UNIVERSITY CURRICULUM COMMITTEE

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

1. College	CENS		2. Academic Unit	Biological Sciences
3. Academic Plan Name	B.S. Exercise Sci	ence	4. Subplan (if applicable)?	
5. Effective Date	e <u>FALL</u>	2007		
6. Is this proposa		New Plan	x Plan Change	Plan Deletion
<u>definitions</u>)		New Subplan	Subplan Change	Subplan Deletion

For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the *current* on line academic catalog:

(http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm)

Be sure you include all catalog text that pertains to this plan change

For New Plans, leave this column blank.

Graduate and Professional Preparation Emphasis.

You take 15-18 units of emphasis requirements, for a total of 89 units in your major:

- EXS 360 or 575 (3 units)
- EXS 478 or 490 (3 units)
- EXS 408C, 414C, 465C, 485C, or 497C, which meet NAU's senior capstone requirement (3 units)
- 6-9 additional units of EXS coursework approved by your advisor

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)

Graduate and Professional Preparation Emphasis.

You take 15-18 units of emphasis requirements, for a total of 89 units in your major:

- EXS 360 or 575 (3 units)
- EXS 478 or 490 (3 units)
- EXS 408C, 414C, 465C, 485C, or 497C, which meet NAU's senior capstone requirement (3 units)

6-9 additional units of EXS coursework **chosen** from the following list:

AT 200 Intro to AT

BIO 205 Microbiology

BIO 320 General Pathology

BIO 331 Developmental Biology

BIO 332 Histology

BIO 340 Genetics and Evolution

BIO 343 Genetics and Evolution Lab

BIO 344 Cellular and Molecular Biology

BIO 350 Molecular Genetics

BIO 424 Comparative Vert. Anatomy

CHM 320/320L Analytical Chemistry

CHM 440 Environmental Chemistry

EXS 485 Research

EXS 497 Independent Study

EXS 408 Fieldwork

EXS 414C Adv. Ex. Physiology (when not

used as capstone)

MAT 136 Calculus I

ME 340 Materials Science

NTS 370 Nutrition and Exercise

PSY 227 Personality

PSY 240 Developmental Psychology

PSY 250 Social Psychology PSY 350 Physiological Psychology PSY 415 Abnormal Psychology SOC 318 Medical Sociology STA 371 Intermediate Statistics STA 472 Nonparametric Statistics

*Please be aware that these courses may have prerequisites.

; { -	For undergraduate plans, will this requirement be a student individualized plan*? x no yes *A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAiLS focus, for which consultation with the advisor. If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.
A If	For undergraduate plans, will a milestone be used to: a. verify satisfactory completion of a non course requirement. b. indicate admission to a major. c. will not be used. Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status. yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the ilestone and keeping individual student records up to date.
	Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage - http://www4.nau.edu/assessment/main/degree/degree.htm).
	Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes. This change formalizes the courses that have been approved by Exercies Science advisors in the past. It is dertaken to make the catalogue description compatible with People Soft.
13	If this condense also below the same additional faculty and the same a
12.	If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied? NA

13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or
enrollment at NAU? No
If so, attach supporting documentation from the affected departments/units and college dean.

14. Will present library holdings support this academic plan/subplan? yes

	Certifications ///	// 36 6/
	1/1/arriesh Walwood	11.69.06
	Department Chair/ Unit Head (if appropriate)	Date
	all aura of Wickenson	100-1-00
	Chair of college curriculum committee	Date
١,	L'Alunneke	+ Dec 06_
//	Dean of college	Date
نة . ا	,	
	For committee use only	1/4/07
	For University Curriculum Committee	Date
	Action taken:approved as submittedapproved as mo	dified
	Note: Submit original to associate provost's office. That office will provide copies to the Information Office after approval.	the college dean, department chair, and Academi

Proposal for New Course

1. is this course being proposed for Liberal Studies designation? Yes No No If yes, route completed form to Liberal Studies.
2. New course effective beginning what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Course subject/catalog number CENE 150L 6. Units 1
7. Co-convened with 7a. Date approved by UGC (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
8. Cross-listed with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
9. Long course title INTRODUCTION TO ENVIRONMENTAL ENGINEERING COMPUTATIONS LAB (max 100 characters including spaces)
10. Short course title (max. 30 characters including spaces) INTRO TO ENV ENGR COMPUTATIONS
11. Catalog course description (max. 30 words, excluding requisites).
Intensive practical study of units, conversion factors, computations, block diagrams and material balance applied to the solution of environmental engineering problems. 12. Grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)
13. Is this a topics course? Yes ☐ No ☒
14. May course be repeated for <i>additional</i> units? a. If yes, maximum units allowed? b. If yes, may course be repeated for additional units in the same term? (ex. PES 100) yes no y
15. Please check ONE of the following that most appropriately describes the course:
Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
Seminar Field Studies Independent Study Activity Supervision
16. Prerequisites (must be completed <i>before</i> proposed course)
17. Corequisites (must be completed <i>with</i> proposed course) CENE 150
18. If course has no requisites, will all sections of the course require (If course has pre or co requisite, skip to question 19):
instructor consent department consent no consent no consent

revised 8/06

19. Is the course needed for a plan of study (major, minor, on Name of new plan? Note: A new plan or plan change form must be su		
20. Does course duplicate content of existing courses within or outside of your college? yes no X If yes, list any courses this course may have duplicative material with and estimate percentage of duplication:		
Please attach letters of support from each dep	artment whose course is listed above.	
21. Will this course affect other academic plans, academic ulif yes, explain in justification and provide supp	mits, or enrollment? yes no _ orting documentation from the affected departments.	
22. Is a potential equivalent course offered at a community college (lower division only)? yes no lif yes, does it require listing in the <u>Course Equivalency Guide</u> ? yes no lift yes, if known, the institution, subject/catalog number of the course.		
23. Justification for new course, including unique features in university format).	fapplicable. (Attach proposed syllabus in the approved	
The current CENE 150 course contains too much material for a 3-credit course. We wish to simplify the existing CENE 150 course so that the "math-related" component is minimized, allowing us to focus CENE 150 as a basic survey-type course that introduces students to the major without the corresponding difficult material. We expect this will increase retention in our major. By adding this 1-credit lab course, the additional problem-solving work will be done in an interactive lab session where students will have more focus on the needed problem solving aspect of the course, better preparing them for 200-level courses in the program.		
Note that the other CENE degree (Civil Engineering) has 1-credit more required for graduation. This increase will allow both programs to have the same number of credits required for graduation.		
24. Names of current faculty qualified to teach this course	Bero, Auberle, Odem, Baxter, Gremillion	
25. If course will require additional faculty, space, or equipment, how will these requirements be satisfied?		
26. Will present library holdings support this course? yes	no 🗌	

NEW JUNIOR LEVEL WRITING COURSE (refer to question 19)	
37. To which degree programs offered by your department/academic unit does this pro-	oposal apply?
38. Do you intend to offer ABC 300 and ABC 300W? yes no If no, please submit a course delete form for the ABC 300.	
GO TO question 42	
NEW SENIOR CAPSTONE COURSE (refer to question 19)	
39. To which degree programs offered by your department/academic unit does this pro-	oposal apply?
40. Does this proposal replace or modify an existing course or experience? yes If yes, which course(s)?	по
41. Do you intend to offer ABC 400 and ABC 400C? yes no If no, please submit a course delete form for the ABC 400.	
42. Approvals	
Sel-	11/15/06
Department Chair (if appropriate)	Date 12-04-06 Date
of collegescurriculum committees Dean of college	7 Dec 06
For Committees use only	
For Liberal Studics Committee	Date
Action taken: Approved as submitted	Approved as modified
Ron Gdf	1/16/07
For University Curriculum Committee	Date '
Action taken:	
Approved as submitted	Approved as modified

If the course being submitted for approval is <u>NOT a LIBERAL STUDIES</u> course, please go to step 42.

LIBERAL STUDIES ONLY

Contact name:	Contact email:
Dept. Chair name:	Dept. Chair email:
College Contact name :	College Contact email:
27. This course is a Single section	☐ Multi-section
28. List names of faculty who may teach this cou	ırse:
29. Section enrollment cap:	
If this course is being submitted for approval a	as a new <u>LIBERAL STUDIES</u> course, please complete questions 30-33.
OR	
If this course is being submitted for approval a	is a new JUNIOR LEVEL WRITING course, please complete questions 37-38.
OR	
If this course is being submitted for approval a	s a new SENIOR CAPSTONE course, please complete questions 39-41.
NEW LIBERAL STUDIES COURSE	
30. Thematic Focus (check all that apply): If a to	opics course, must apply to ALL sections.
	logy and Its Impact Valuing the Diversity of Human Experience
	ourse, must apply to <u>ALL</u> sections. Cultural Understanding
32. Skills (check two): If a topics course, must ap	oply to <u>ALL</u> sections.
Creative Thinking Critical Reading Thinking	Effective Oral Communication Effective Writing Critical
Ethical Reasoning Quantitative/Spatial	Analysis Scientific Inquiry Use of Technology
33. Is this a topics course? Yes No If YES, please complete questions 34-36. If Y] NO, please go to question 42.
TOPICS COURSE ONLY	
34. Identify the <u>Student Learning Outcomes</u> that w	rill be found in ALL topic syllabi offered under this course number.
35. Explain by what method(s) Student Learning C	Outcomes will be assessed in ALL topic syllabi offered under this course number.
· · · · ·	
26 19	
36. Please attach an example of a Topic Syllabus o	ffered under this course number.

GO TO question 42/06

Course Syllabus CENE 150L Environmental Engineering Computations Laboratory

		o g		
General	Name of College and	Civil & Environmental Engineering, College of		
Information:	Department:	Engineering and Natural Sciences		
	Course Prefix,	CENE 150L, Environmental Engineering		
	Number, and Title	Computations Laboratory		
	Semester:	Fall 2007		
	Clock Hours / Credit	3 clock hours, 1 credit hour		
	Hours:			
	Instructor:	Bridget N. Bero, Ph.D., P.E., Associate Professor		
	Office Address:	Room 306, Engineering, Bldg. 69		
		(928) 523-2051		
		Bridget.Bero@nau.edu		
	Office Hours:	TBD		
Course Prerequisites:	Corequisite: CENE 150			
Course	Intensive practical study of	funio		
Description:	and material balance appli	of units, conversion factors, computations, block diagrams		
ı	and material butance appro	ied to the solution of environmental engineering problems.		
Student	This course will provide v	ou with a strong foundation in problem solving skills.		
Learning	Upon successful completion	on of this course, students will be able to:		
Expectations /	i a a a a a a a a a a a a a a a a a a a	on or this course, students will be able to:		
Outcomes for	• Evelein seeite			
this Course:	Explain units per	tinent to environmental engineering,		
	Perform unit conversions,			
	Draw block diagrams,			
	 Write material balance equations and perform calculations, 			
	Solve environment	ntal engineering related problems		
Course	Laboratory format.			
Structure and	***			
Approach:				
Textbook and	Pierce, J. Jeffrey, R.F.Weir	ner, and P.A.Vesilind. Environmental Pollution and		
Required	Control, 4th ed., Butterwor	th-Heinemann, Boston, 1998.		
Materials:				
Recommended	Handouts will be provided	as needed.		
Optional				
Material /				
References:				
Course Outline:	omits and anit conversion			
	Week 4-12: Block diag	rams and material balances		
	Week 13-15: Radioactiv	e decay and air pollution dispersion		
Assessment of	34.41			
Assessment of Student	lyreinous of Assessment: A	Assessment of students' achievement of this course's		
	rearring outcomes is done via homework (individual and group), quizzes and			
earning Outcomes:	examinations.	- -		
accomes;				
	 Quizzes: Simple qui 	uizzes are provided to reinforce concepts. Quizzes		
:	constitute 15% of y	our grade.		
	 Homework: Home 	ework, more complex than guizzes, is assigned to		
	Homework: Homework, more complex than quizzes, is assigned to reinforce and assess the concepts and skills demonstrated in example			
	problems. Some gre	oup projects/homework assignments will be required.		
	Homework may be	done in consultation with classmates, but each person		
	will be tested indiv	idually. Homework constitutes 25% of your class grade.		
	oc tooled many			
And the same	• Exams: Exams are	used to assess overall learning. There will be 3 exams		

for the course. All exams are comprehensive. Each exam constitutes 20% of your class grade. Exams are closed-book and closed-notes.

• The course final grade will be based upon: A = >90%; B = >80%; C = >70%; D = >60%; F = <59%

Timeline for Assessment: Quizzes are done at the beginning of each lab period. Homework assignments are assigned each week and are due the following week. Exams are generally spaced equally throughout the semester.

Grading Scheme Quizzes: Homework Exams (3) Total:	Points 15 25 60 100	A B C D	≥0% ≥30% ≥30% ≥50%	
	100	F	≥50% <60%	
	Quizzes: Homework Exams (3)	Quizzes: 15 Homework 25 Exams (3) 60	Quizzes: 15 A Homework 25 B Exams (3) 60 C Total: 100 D	Quizzes: 15 A ≥0% Homework 25 B ≥80% Exams (3) 60 C ≥70% Total: 100 D ≥60%

Course Policies:

Out-of-class work expectations:

Students are expected to spend an additional 3 hours per week on the
course beyond in-class time (self study, homework and project work). This
is standard for a 1-credit course (reference: NAU Academic Contact Hour
Policy).

Homework:

- All activities / assignments have a specified due date; LATE WORK IS NOT ACCEPTED UNLESS APPROVED BY THE INSTRUCTOR.
- Homework must be neat, straightforward and readable with all assumptions, equations and supporting information listed. All non-computational written assignments must be completed using a computer word processing application and double spaced. All computational assignments must be printed on the plain side of engineering grid paper. All solutions must be presented with answers and conclusions clearly indicated (i.e., boxed). Staple multiple pages. Assignments submitted that are judged illegible or difficult to follow during grading will be returned without grading, and may not be resubmitted. Handwritten assignments are to be turned in by the due date either by dropping off at my office (under door or in my department mailbox) or faxing.
- TIPS for a good grade: Be proactive! Look at homework well in advance of
 its due date ask questions via the online course or see me for help. After
 the homework is graded, pick it up and go over it with the key to assure that
 you are comfortable with the concepts. If you aren't ask again!

Exams:

Missed exams cannot be made up without prior consent of the instructor.

Statement on Plagiarism and Cheating

 Plagiarism, cheating, and other forms of misconduct are subject to the Arizona Board of Regents' Code of Conduct and the procedures outlined in the NAU Student Handbook Section 5-308. Websites for these documents may be consulted at:

Arizona Board of Regents' Code of Conduct: http://www.abor.asu.edu/l_the_regents/policymanual/chap5/index.html

NAU Student Handbook:

Proposal for New Course

 Is this course being proposed for Liberal Studies designation? Yes No No If yes, route completed form to Liberal Studies.
2. New course effective beginning what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College CENS 4. Academic Unit CENE
5. Course subject/catalog number CENE 383L 6. Units 1
7. Co-convened with 7a. Date approved by UGC (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
8. Cross-listed with
(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
9. Long course title GEOTECHNICAL ENGINEERING I LAB (max 100 characters including spaces)
10. Short course title (max. 30 characters including spaces) GEOTECHNICAL ENGINEERING I LAB
11. Catalog course description (max. 30 words, excluding requisites).
Lab experiments to reinforce the concepts discussed in CENE 383. Must be taken concurrently with NE 383. 12. Grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)
13. Is this a topics course? Yes \(\subseteq \text{No } \subseteq \)
14. May course be repeated for additional units? a. If yes, maximum units allowed? b. If yes, may course be repeated for additional units in the same term? (ex. PES 100) yes no yes yes yes yes yes yes yes yes
5. Please check ONE of the following that most appropriately describes the course:
Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
Seminar Field Studies Independent Study Activity Supervision
6. Prerequisites (must be completed <i>before</i> proposed course)
7. Corequisites (must be completed <i>with</i> proposed course) CENE 383
8. If course has no requisites, will all sections of the course require (If course has pre or co requisite, skip to question 19):
instructor consent odepartment consent no consent

19. Is the course needed for a plan of study (major, minor, certificate)? yes \(\sum \) no \(\sum \)
Note: A new plan or plan change form must be submitted with this request.
20. Does course duplicate content of existing courses within or outside of your college? yes \(\subseteq \) no \(\subseteq \) If yes, list any courses this course may have duplicative material with and estimate percentage of duplication:
Please attach letters of support from each department whose course is listed above.
21. Will this course affect other academic plans, academic units, or enrollment? yes no Miles in justification and provide supporting documentation from the affected departments.
22. Is a potential equivalent course offered at a community college (lower division only)? yes no If yes, does it require listing in the <u>Course Equivalency Guide</u> ? yes no Please list, if known, the institution, subject/catalog number of the course.
23. Justification for new course, including unique features if applicable. (Attach proposed syllabus in the approved university format).
Currently part of 4-unit course. We propose to conduct separate 3-unit lecture course and 1-unit laboratory course. This will allow us to assess laboratory experiences for our civil engineering students, in response to accreditation requirements.
24. Names of current faculty qualified to teach this course Charles Schlinger, Clyde Holland
25. If course will require additional faculty, space, or equipment, how will these requirements be satisfied?
26. Will present library holdings support this course? yes 🔲 no 📋

If the course being submitted for approval is <u>NOT a LIBERAL STUDIES</u> course, please go to step 42.

LIBERAL STUDIES ONLY

Contact name:	Contact email:
Dept. Chair name:	Dept. Chair email:
College Contact name :	College Contact email:
	_
27. This course is a Single section	Multi-section
28. List names of faculty who may teach this course:	·
29. Section enrollment cap:	
If this course is being submitted for approval as a <i>OR</i>	new <u>LIBERAL STUDIES</u> course, please complete questions 30-33.
If this course is being submitted for approval as a	new <u>JUNIOR LEVEL WRITING</u> course, please complete questions 37-38.
OR	
If this course is being submitted for approval as a	new <u>SENIOR CAPSTONE</u> course, please complete questions 39-41.
NEW LIBERAL STUDIES COURSE	
30. Thematic Focus (check all that apply): <i>If a topic</i> .	a common must must be AXI — C
Environmental Consciousness	y and Its Impact Valuing the Diversity of Human Experience
<u> </u>	se, must apply to ALL sections. ural Understanding Lab Science olitical Worlds
32. Skills (check two): If a topics course, must apply	to <u>ALL</u> sections.
Creative Thinking Critical Reading Thinking	Effective Oral Communication
Ethical Reasoning Quantitative/Spatial An	alysis Scientific Inquiry Use of Technology
33. Is this a topics course? Yes No If YES, please complete questions 34-36. If NO,	please go to question 42.
TOPICS COURSE ONLY	
34. Identify the <u>Student Learning Outcomes</u> that will	be found in ALL topic syllabi offered under this course number.
25 T 1: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
33. Explain by what method(s) Student Learning Outo	comes will be <u>assessed</u> in <u>ALL</u> topic syllabi offered under this course number.
36. Please attach an example of a Topic Syllabus offer	red under this course number.

GO TO questing 42/06

NEW JUNIOR LEVEL WRITING COURSE (refer to question 19)	<u>)</u>	
37. To which degree programs offered by your department/academic u		
29 Dames into the CC appears and a	no 🗌	<u>(, , , , , , , , , , , , , , , , , , ,</u>
GO TO question 42		
NEW SENIOR CAPSTONE COURSE (refer to question 19)		
39. To which degree programs offered by your department/academic u	nit does this proposal apply?	
40. Does this proposal replace or modify an existing course or experient If yes, which course(s)?	nce? yes no no	
41. Do you intend to offer ABC 400 and ABC 400C? yes no If no, please submit a course delete form for the ABC 400.		
42. Approvals		
	11/15/06	
Department Chair (if appropriate)	Date	
Chair of college curriculum committee	196-106 Date	-(-
Dean of college	7 Dec 06	
	Date	_
For Committees use only		
For Liberal Studies Committee	Date	
Action taken: Approved as submitted		
	Approved as modified	
For University Curriculum Committee	11112107	
For ourselving Committee	Date	<u> </u>
Action taken:		
Approved as submitted	Approved as a	modifi

Course Syllabus CENE 383L Geotechnical Engineering I Laboratory

	1122				
General	Name of College and	Civil & Environmental Engineering, College of			
Information:	Department:	Engineering and Natural Sciences			
	Course Prefix, Number, and Title	CENE 383L, Geotechnical Engineering I Laboratory			
	Semester:	Spring 2008			
	Clock Hours / Credit	3 clock hours, 1 credit hour			
	Hours:	,			
	Instructor: Clyde N. Holland, Ph.D., P.E., Associate Professor				
	Office Address: Room 205, Engineering, Bldg. 69				
	The state of the s	(928) 523-4440			
		Clyde.Holland@nau.edu			
	Office Hours:	Monday: 9:00am-11:30am; Tuesday: 9:30am-10:30am			
Course	Corequisite: CENE 383				
Prerequisites:					
Course	Lab experiments to reinfo	arce the concepts discussed in CENE 383. Must be taken			
Description:	concurrently with CENE				
•					
Student	Through laboratory exerc	ises students will develop expertise in several of the			
Learning		nalyzing the mechanical properties of soil (ABET criterion			
Expectations /	3j); design, conduct, and	evaluate experiments and their data (ABET criterion 3c);			
Outcomes for	and prepare thorough tech	nical reports (ABET criterion 3g).			
this Course:	edition van				
Course	We will meet once weekl	y. Each week students will conduct a laboratory exercise,			
Structure and	beginning promptly at 3:0	0pm. Generally all work will be completed by 5:30pm,			
Approach:	including cleaning and storage of all equipment and cleaning of all work areas. Lab				
	reports will be due by the beginning of the following class period. A laboratory practical exam will be given on the last meeting day of the semester, in which				
	students will have to demonstrate mastery of one or more of the techniques co during the term.				
	daning the term.				
	estato a				
Textbook and	C. Liu and J.B. Evett, 200	3. Soil Properties: Testing, Measurement, and			
Textbook and Required	C. Liu and J.B. Evett, 200 Evaluation, 5 th Edition, Pr	3. Soil Properties: Testing, Measurement, and rentice Hall.			
	C. Liu and J.B. Evett, 200 Evaluation, 5 th Edition, Pr	3. Soil Properties: Testing, Measurement, and rentice Hall.			
Required	C. Liu and J.B. Evett, 200 Evaluation, 5 th Edition, Properties Handouts will be provided	rentice Hall.			
Required Materials:	Evaluation, 5th Edition, Pr	rentice Hall.			
Required Materials: Recommended Optional Material /	Evaluation, 5th Edition, Pr	rentice Hall.			
Required Materials: Recommended Optional Material / References:	Evaluation, 5 th Edition, Provided	entice Hall.			
Required Materials: Recommended Optional Material /	Evaluation, 5 th Edition, Provided Handouts will be provided Week 1: Field sample	entice Hall. I as needed. ing Week 9: Unconfined compression test			
Required Materials: Recommended Optional Material / References:	Evaluation, 5 th Edition, Provided Handouts will be provided Week 1: Field sample Week 2: Specific gravity	ing Week 9: Unconfined compression test wity Week 10: Spring break			
Required Materials: Recommended Optional Material / References:	Handouts will be provided Week 1: Field sampl Week 2: Specific gra Week 3: Dry sieve a	ing Week 9: Unconfined compression test wity Week 10: Spring break was week 11: Direct shear			
Required Materials: Recommended Optional Material / References:	Week 1: Field sampl Week 2: Specific gra Week 3: Dry sieve a Week 4: Wet sieve a	ing Week 9: Unconfined compression test wity Week 10: Spring break week 11: Direct shear Neek 12: Consolidation			
Required Materials: Recommended Optional Material / References:	Week 1: Field sampl Week 2: Specific gra Week 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg li	ing Week 9: Unconfined compression test Week 10: Spring break walysis Week 11: Direct shear nalysis Week 12: Consolidation mits Week 13: Triaxial test			
Required Materials: Recommended Optional Material / References:	Week 1: Field sampl Week 2: Specific gra Week 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg li Week 6: Classification	ing Week 9: Unconfined compression test wity Week 10: Spring break malysis Week 11: Direct shear malysis Week 12: Consolidation mits Week 13: Triaxial test on Week 14: Expansive soils			
Required Materials: Recommended Optional Material / References:	Week 1: Field sampl Week 2: Specific gra Week 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg li Week 6: Classificatie Week 7: Standard Pr	ing Week 9: Unconfined compression test wity Week 10: Spring break malysis Week 11: Direct shear malysis Week 12: Consolidation mits Week 13: Triaxial test on Week 14: Expansive soils octor Week 15: Permeability			
Required Materials: Recommended Optional Material / References:	Week 1: Field sampl Week 2: Specific gra Week 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg li Week 6: Classification	ing Week 9: Unconfined compression test wity Week 10: Spring break malysis Week 11: Direct shear malysis Week 12: Consolidation mits Week 13: Triaxial test on Week 14: Expansive soils octor Week 15: Permeability			
Required Materials: Recommended Optional Material / References: Course Outline:	Week 1: Field sample Week 2: Specific graweek 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg li Week 6: Classification Week 8: Field unit was series was series with the series of	ing Week 9: Unconfined compression test wity Week 10: Spring break malysis Week 11: Direct shear malysis Week 12: Consolidation mits Week 13: Triaxial test on Week 14: Expansive soils octor Week 15: Permeability			
Required Materials: Recommended Optional Material / References: Course Outline: Assessment of	Week 1: Field sample Week 2: Specific graweek 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg li Week 7: Standard Present Week 8: Field unit week 8: Methods of Assessment	ing Week 9: Unconfined compression test wity Week 10: Spring break Meek 11: Direct shear Meek 12: Consolidation Meek 13: Triaxial test Meek 14: Expansive soils Meek 15: Permeability Meek 16: Lab Practical			
Required Materials: Recommended Optional Material / References: Course Outline: Assessment of Student	Week 1: Field sample Week 2: Specific graweek 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg lie Week 6: Classification Week 8: Field unit week 8: Field unit week 8: Field unit week 8: Methods of Assessment Assessing students' achieve	ing Week 9: Unconfined compression test wity Week 10: Spring break Meek 11: Direct shear Meek 12: Consolidation Meek 13: Triaxial test Expansive soils Meek 14: Expansive soils Meek 15: Permeability Meek 16: Lab Practical			
Required Materials: Recommended Optional Material / References: Course Outline: Assessment of Student Learning	Week 1: Field sample Week 2: Specific graweek 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg lie Week 6: Classification Week 8: Field unit week 8: Field unit week 8: Field unit week 8: Methods of Assessment Assessing students' achieve	ing Week 9: Unconfined compression test wity Week 10: Spring break Direct shear Week 12: Consolidation Week 13: Triaxial test Expansive soils Week 14: Expansive soils Week 15: Permeability Week 16: Lab Practical			
Required Materials: Recommended Optional Material / References: Course Outline: Assessment of Student	Week 1: Field sampl Week 2: Specific gra Week 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg li Week 6: Classificati Week 7: Standard Pr Week 8: Field unit w Methods of Assessment Assessing students' achiev homework, quizzes, exam	ing Week 9: Unconfined compression test wity Week 10: Spring break malysis Week 11: Direct shear malysis Week 12: Consolidation mits Week 13: Triaxial test on Week 14: Expansive soils octor Week 15: Permeability reight Week 16: Lab Practical ement of this course's learning outcomes is done using inations and project assignments.			
Required Materials: Recommended Optional Material / References: Course Outline: Assessment of Student Learning	Week 1: Field sample Week 2: Specific graweek 3: Dry sieve a Week 4: Wet sieve a Week 5: Atterberg lie Week 6: Classification Week 8: Field unit week 8: Field unit week 8: Field unit week 8: Field unit week 9: Assessing students' achieved homework, quizzes, exam	ing Week 9: Unconfined compression test wity Week 10: Spring break Meek 11: Direct shear Meek 12: Consolidation Meek 13: Triaxial test Meek 14: Expansive soils Meek 15: Permeability Meek 16: Lab Practical			

and interpretation, and quality of technical writing. Lab Practical: Mastery of lab techniques will be evaluated in two parts: Successful demonstration of one or more laboratory procedures and completion of a practical exam. Timeline for Assessment Lab reports assigned throughout the semester with due dates specified. Typically these will be submitted in-person at the beginning of the first lab session after the report is assigned. Late reports will not be graded. The lab practical will take place during the last lab session of the semester. Grading Scale Points Grading Grading Scheme 50 ≥90% System: Lab report, technical content: Α 25 В **≥**80% Lab report, technical writing C ≥10% Lab practical 15 Lab exam: 10 D ≥60% 100 F <60% Total: Course Policies: Retests / Makeup Tests There are no make-up assignments for homework and no make-up or restesting for quizzes and exams. Attendance Keeping current with the class material and participating in online discussions are the responsibility of the student. Statement on Plagiarism and Cheating Plagiarism, cheating, and other forms of misconduct are subject to the Arizona Board of Regents' Code of Conduct and the procedures outlined in the NAU Student Handbook Section 5-308. Websites for these documents may be consulted at: Arizona Board of Regents' Code of Conduct: http://www.abor.asu.edu/1 the regents/policymanual/chap5/index.html NAU Student Handbook: http://www4.nau.edu/stulife/handbook.htm NAU Student Code of Conduct: http://www4.nau.edu/stulife/handbookcode.htm Disciplinary Action: http://www4.nau.edu/stulife/handbookdisciplinary.htm Safe Working and Learning Environment: University Policies: http://oak.ucc.nau.edu/dam1/Safe%20Policy.htm Students with Disabilities: http://www2.nau.edu/dss/ Institutional Review Board: http://www4.nau.edu/ovp/irb/index.htm Academic Integrity Guidance: http://www.nau.edu/library/information/guides/plagiarism.html

College of Engineering and Natural Sciences Policies:

Professional Ethics and Code of Conduct

Exceptionally high standards of honor and integrity are fundamental and essential to the study and practice of engineering. Academic preparation for the profession must be conducted in an atmosphere which fosters these values.

In addition to compliance with the Student Code of Conduct and Policy that apply to all students at NAU, engineering students are expected to conduct themselves professionally. Violation of the National Society of Professional Engineers (NSPE) Code of Ethics, found at http://www.nspe.org/ethics/ehl-code.asp or the Association of Computing Machinery (ACM) Code of Ethics and Professional Conduct, found at http://www.acm.org/constitution/code.html may lead to dismissal from the College's academic programs.

Violations of any of these codes will be handled as detailed in the publications listed above, and will be documented in the student's advisement file.

Faculty members may ask students to affirm in writing that they have neither given nor received unauthorized aid on an examination or assignment.

PROPOSAL FOR COURSE CHANGE

1. Is this a l	Liberal Studies or Diversity Course?	Liberal Studi	ies 🗌	Diversity		Both L	_
	hange effective beginning of what ter ing 2008, Summer 2008) <i>See effectiv</i>		Fall 20	007			
3. College	CENS		4. Acade	mic Unit <u>CI</u>	ENE		
5. Current c	ourse subject/catalog number	CENE 383					
6. Current c	atalog title, course description, and	units. (Copy and po	aste from <u>cı</u>	irrent on-line	academic c	atalog).	
SOIL ME	ECHANICS AND FOUNDAT	TIONS (4)					
strength,	erties; identification and clas stresses, and settlement; subs grade greater than or equal t	structure desigi	th mater n; compu	ial; subsurf ter applicat	ace explo	ration of requisite	isoil : CENE
7. Is course	currently cross-listed or co-convened If yes, list course Will this continue?	d? yes 🗌	no				
If r	an elective? or requerequired, for what academic plan/subprequired, also submit <i>Proposal for I</i>		., Environn		1		
9. Will othe require If	er courses or academic units, be affect ments, etc.) yes \[\] No yes, explain in the justification and p	ted by this change? o 🔯 provide supporting d	(Consider p			rtments.	
10. Does th	is change affect community college a If yes, explain how in the justification	n and provide support	es orting docum		the affecte	d institution	as.
	Is the course a Common Course as de If yes, has the change been approved				no [no 🛛	
	If this course has been listed in the <u>Course</u> be left as is, <u>or to the revised</u> of the revised?	be revised? 🛛		ld that listing	itle.		

FOR SECTION 11 ONLY COMPLETE WHAT IS CHANGING.

11.	a. Proposed course subject /catalog number	b. Proposed units 3
		here a course fee attached to the current subject/catalog
Only fill in what is	number that needs to be moved? Y	
hanging.	If yes, please attach a Justification For number change.	rm for Instructional Fees indicating the new course subject/catalog
f	1.70	Data annual har LICC
nformation remaining	d. Proposed to co-convene with	Date approved by UGC to UCC. Both course syllabi must be presented.)
he same,	(Musi be approved by OGC prior to bringing t	OCC. Both Course sylluol must be presentedly
eave the	e. Proposed to cross-list with	
ection lank.	(Please submit a single cross-listed syllabus th	at will be used for all cross-listed courses.)
	f. Proposed long course title GEOT	ECHNICAL ENGINEERING I
	(max 100 characters including spaces)	
•	g. Proposed short course title	
	(max 30 characters including spaces)	GEOTECHNICAL ENGINEERING I
	h. Proposed catalog course description (max. 30	words, excluding requisites)
	m repease sermed control according (many c.	
prop		of earth materials, subsurface exploration, index ge, strength, and settlement, introduction to earth
pres	suite unuity sis, unici i circugiii s Deuring C	mpmore, i
		• •
		Pass/Fail or Both
	i. Proposed grading option: Letter grade (If both, the course may only be offered one	Pass/Fail or Both
	(If both, the course may only be offered one	Pass/Fail or Both eway for each respective section.)
	i. May course be repeated for additional units?	Pass/Fail or Both
	j. May course be repeated for additional units? j.1. If yes, maximum units allowed?	Pass/Fail or Both e way for each respective section.) yes no
	j. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition	Pass/Fail or Both way for each respective section.)
	j. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition	Pass/Fail or Both e way for each respective section.) yes no
	i. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition yes no	Pass/Fail or Both e way for each respective section.) yes no
	i. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition yes no k. Please check ONE of the following that most	Pass/Fail or Both way for each respective section.) yes no all units in the same term? (ex. BIO 300, PES 100) appropriately describes the proposed course change(s):
	i. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition yes no k. Please check ONE of the following that most Lecture w/0 unit embedded lab Lecture	Pass/Fail or Both way for each respective section.) yes no all units in the same term? (ex. BIO 300, PES 100) appropriately describes the proposed course change(s): ceture only Lab only Clinical Research
	i. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition yes no k. Please check ONE of the following that most Lecture w/0 unit embedded lab Lecture	Pass/Fail or Both seway for each respective section.) yes no all units in the same term? (ex. BIO 300, PES 100) appropriately describes the proposed course change(s): ceture only Lab only Clinical Research Supervision
	i. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition yes no k. Please check ONE of the following that most Lecture w/0 unit embedded lab Le Seminar Field Studies	Pass/Fail or Both seway for each respective section.) yes no all units in the same term? (ex. BIO 300, PES 100) appropriately describes the proposed course change(s): ceture only Lab only Clinical Research Supervision Supervision
	i. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition yes no k. Please check ONE of the following that most Lecture w/0 unit embedded lab Lecture	Pass/Fail or Both seway for each respective section.) yes no all units in the same term? (ex. BIO 300, PES 100) appropriately describes the proposed course change(s): ceture only Lab only Clinical Research Supervision Supervision
	i. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition yes no k. Please check ONE of the following that most Lecture w/0 unit embedded lab Le Seminar Field Studies	Pass/Fail or Both seway for each respective section.) yes no all units in the same term? (ex. BIO 300, PES 100) appropriately describes the proposed course change(s): acture only Lab only Clinical Research Supervision Supervision Independent Study Activity Supervision ore)
	i. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition yes no k. Please check ONE of the following that most Lecture w/0 unit embedded lab Lesseminar Field Studies l. Proposed prerequisites (must be completed before.) I. Proposed corequisites (must be completed with the complete with the comp	Pass/Fail or Both se way for each respective section.) yes no all units in the same term? (ex. BIO 300, PES 100) appropriately describes the proposed course change(s): ceture only Lab only Clinical Research Supervision Independent Study Activity Supervision ore) CENE 383L
	i. May course be repeated for additional units? j.1. If yes, maximum units allowed? j.2. If yes, may course be repeated for addition yes no k. Please check ONE of the following that most Lecture w/0 unit embedded lab Lesseminar Field Studies l. Proposed prerequisites (must be completed before.) I. Proposed corequisites (must be completed with the complete with the comp	Pass/Fail or Both seway for each respective section.) yes no all units in the same term? (ex. BIO 300, PES 100) appropriately describes the proposed course change(s): ceture only Lab only Clinical Research Supervision Supervision Independent Study Activity Supervision ore)

CENE 383

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

Laboratory component to become separate new course. This will allow us to assess laboratory experiences for our civil engineering students, in response to accreditation requirements.

As part of our preparation for an upcoming accreditation visit, we have reviewed all of our course descriptions. Course content has been modified gradually to reflect current practice in engineering. The proposed changes reflect the current content of the course.

Lab course to become corequisite. Prerequisites unchanged, but repeated in Line 11-1 to clarify that prerequisites have not been dropped.

, rea-	11/15/06 Date
Department Chair/ Unit Head (if appropriate)	DOC) 2006
Chair of college curriculum committee AF Aurenneke	Date
Dean of college	Date
For Committee use only	1110107
For University Curriculum Committee	Date
,	
Action taken: approved as submitted	approved as modified

13. Approvals

Proposal for New Course

1. Is this course being proposed for Liberal Studies designation If yes, route completed form to Liberal Studies.	? Yes ☐ No ☑
2. New course effective beginning what term and year? (ex. Spingle effective dates schedule.	ring 2008, Summer 2008) Fall 2007
3. College CENS	4. Academic Unit CENE
5. Course subject/catalog number CENE 457	6. Units <u>3</u> .
7. Co-convened with (Must be approved by UGC prior to bringing to UCC. Both	7a. Date approved by UGC
8. Cross-listed with (Please submit a single cross-listed syllabus that will be used)	d for all cross-listed courses.)
9. Long course title MASONRY DESIGN (max 100 characters including spaces)	
10. Short course title (max. 30 characters including spaces)	MASONRY DESIGN
11. Catalog course description (max. 30 words, excluding requi	
Pass/Fail (If both, the course may only be offered one way for each respectively).	or Both
13. Is this a topics course? Yes ☐ No ☒	
14. May course be repeated for <i>additional</i> units?a. If yes, maximum units allowed?b. If yes, may course be repeated for additional units in the second course.	yes
15. Please check ONE of the following that most appropriately	describes the course:
Lecture w/0 unit embedded lab Lecture or	nly 🛮 Lab only 🗌 Clinical 🗍 Research 🗍
Seminar Field Studies Inc	dependent Study Activity Supervision
16. Prerequisites (must be completed <i>before</i> proposed course)	CENE 253
17. Corequisites (must be completed <i>with</i> proposed course)	
18. If course has no requisites, will all sections of the course req	uire (If course has pre or co requisite, skip to question 19):
instructor consent department consen	t no consent

19. Is the course needed for a plan of study (major, minor, certificate)? yes no Name of new plan?
Note: A new plan or plan change form must be submitted with this request.
20. Does course duplicate content of existing courses within or outside of your college? yes no If yes, list any courses this course may have duplicative material with and estimate percentage of duplication:
Please attach letters of support from each department whose course is listed above.
21. Will this course affect other academic plans, academic units, or enrollment? yes no If yes, explain in justification and provide supporting documentation from the affected departments.
22. Is a potential equivalent course offered at a community college (lower division only)? yes
23. Justification for new course, including unique features if applicable. (Attach proposed syllabus in the approved university format).
Accreditation in civil engineering requires that our students become proficient in four separate areas of specialization. Currently students have few options for electives to meet the structural engineering specialization. This course provides such an elective for civil engineering students.
24. Names of current faculty qualified to teach this course
25. If course will require additional faculty, space, or equipment, how will these requirements be satisfied?
26. Will present library holdings support this course? yes \(\sigma\) no \(\sigma\)

If the course being submitted for approval is NOT a LIBERAL STUDIES course, please go to step 42.

LIBERAL STUDIES ONLY

Contact name:	Contact email:	
Dept. Chair name:	Dept. Chair email:	
College Contact name :	College Contact email:	
27. This course is a Single se	tion	
28. List names of faculty who may	each this course:	
29. Section enrollment cap:		
If this course is being submitted for	or approval as a new <u>LIBERAL STUDIES</u> course, please complete questions 30-33.	
OR		
If this course is being submitted for	or approval as a new <u>JUNIOR LEVEL WRITING</u> course, please complete questions 37	7-38.
OR		
If this course is being submitted for	or approval as a new <u>SENIOR CAPSTONE</u> course, please complete questions 39-41.	
NEW LIBERAL STUDIES COUL	RSE	
30. Thematic Focus (check all that	apply): If a topics course, must apply to <u>ALL</u> sections.	
Environmental Consciousness	Technology and Its Impact Valuing the Diversity of Human Experience	
31. Distribution Block (check one) Aesthetic and Humanistic Inqui Science/Applied Science	ry Cultural Understanding Lab Science Social and Political Worlds	
32. Skills (check two): If a topics of	ourse, must apply to <u>ALL</u> sections.	
Creative Thinking Critic	al Reading Effective Oral Communication Effective Writing Critical	
-	titative/Spatial Analysis	
33. Is this a topics course? Yes [If YES, please complete question	No Dis 34-36. If NO, please go to question 42.	
TOPICS COURSE ONLY 34 Identify the Student Learning (outcomes that will be found in ALL topic syllabi offered under this course number.	
51. Identify the <u>Student Learning C</u>		
35. Explain by what method(s) Stu	dent Learning Outcomes will be <u>assessed</u> in <u>ALL</u> topic syllabi offered under this course num	nber.

GO TO question 42/06

36. Please attach an example of a Topic Syllabus offered under this course number.

NEW JUNIOR LEVEL WRITING COURSE (refer to question 19)		
37. To which degree programs offered by your department/academic ur	uit does this proposal apply?	
38. Do you intend to offer ABC 300 and ABC 300W? yes In no., please submit a course delete form for the ABC 300.		\bigcirc
GO TO question 42		
NEW SENIOR CAPSTONE COURSE (refer to question 19)		
39. To which degree programs offered by your department/academic ur	it does this proposal apply?	
40. Does this proposal replace or modify an existing course or experient If yes, which course(s)?	ce? yes no	
41. Do you intend to offer ABC 400 and ABC 400C? yes no [If no, please submit a course delete form for the ABC 400.]	
42. Approvals		
	11/15/06	_
Department Chair (if appropriate) Accome A Wildingrowth	Date Dec 7, 2006	_(
Chair of college curriculum committee	Date 7 Dec 06	_
Dean of college	Date	
For Committees use only		
		_
For Liberal Studies Committee	Date	
Action taken: Approved as submitted	Approved as modified	
Ron BAt	1/16/07	
For University Curriculum Committee	l Datd	
Action taken:		
Approved as submitted	Approved as m	iodifi(

Course Syllabus CENE 457 Masonry Design

General Information: Course Prerequisites:	Name of College and Department: Course Prefix, Number, and Title Semester: Clock Hours / Credit Hours: Instructor: Office Address: Office Hours: CENE 253	Civil & Environmental Engineering, College of Engineering and Natural Sciences CENE 457 Masonry Design Fall 2007 3 clock hours per week; 3 credit hours. Joshua T. Hewes, Ph.D., P.E., Assistant Professor Room 322E, Engineering, Bldg. 69 (928) 523-1478 Joshua.Hewes@nau.edu TBA, or by appointment.	
Course Description:	reinforced masonry mem beams, walls (in-plane, o	an introduction to the behavior, analysis, and design of bers subjected to axial, flexure, and shear loading. Masonry ut-of-plane, and shear loads) and columns, will be covered. ments will be covered, and practical application of concepts	
Student Learning Expectations / Outcomes for this Course:	On completing this course, students will be able to: 1. Describe the behavior and characteristics of reinforced masonry materials. 2. Describe the difference between allowable stress design and ultimate strength design concepts. 3. Analyze and design masonry members for flexure and shear using both allowable stress and ultimate strength design procedures. 4. Analyze and design masonry columns and walls for axial plus bending loads using ultimate strength design procedures. 5. Analyze and design masonry shear walls used for lateral load resisting systems using ultimate strength design procedures. 6. Apply the Building Code Requirements for Masonry Structures, ACI 530 code to the analysis and design of masonry structures.		
Course Structure and Approach:	week. Weekly homework reinforce concepts discus	ditional lecture format with class meeting two times per cassignments will be given that will emphasize and sed in lecture. Class participation will be expected, with sisting of student groups working together to solve assigned	
Textbook and Required Materials: Recommended Optional Material / References:	Inc., 2001. Supplemental materials w Building Code Requireme	will also be provided on the Vista web page. ents for Masonry Structures 2005 - ACI 530, Masonry ee, The Masonry Society, 2005.	
Course Outline:	Weeks 2 – 4: Bo Week 5: Bo Weeks 6 – 7: Bo Weeks 8: Bo	ourse Introduction and Masonry Materials eam Elastic Flexural Design and Deflections eam ASD Shear Design eam Ultimate Strength Design for Flexure eam Ultimate Strength Design for Shear olumn Analysis and Design	

	Weeks 11 – 12: Wall A Weeks 13 – 14: Wall A Week 15: Review Week 16: Final E	nalysis and D	Design for O Design for In	ut-of-Plane Loads 1-Plane Loads (Shear	Walls)
Assessment of Student Learning	Methods of Assessment Assessing students' achievement of this course's learning outcomes is done using homework, quizzes, examinations and project assignments.				
Outcomes:	Discussions and Homework: Homework is assigned to promote understand of certain topics. Homework typically consists of worked problems, but will a include assigned readings.				standing will also
	Quizzes: Quizzes are give encourage students to keep	en to assess us up with the	nderstanding course mate	g of particular topics rial on a weekly basi	and to s.
	Exams: Exams are admin learning outcomes.	istered to ass	ess student a	achievement of cours	e
	Timeline for Assessment Homework is assigned throug homework is not accepted. Qu Three exams will be given du 16.	izzes will oc	cur once pe	r week and are unanr	ounced.
Cyading	Grading Scheme	Points	Grad	ling Scale	
Grading System:	Homework:	35	A	≥90%	
System.	Quizzes:	5	В	≥80%	
	Exam 1:	15	c	≥70%	
	Exam 2:	15	Ď	≥60%	
	Exam 3:	15	F	<60%	
	Final Exam:	15	•		
	Total:	100	•		
Course Policies:	Retests / Makeup Tests				
	There are no make-up exams	without prior	approval fr	om the instructor. Th	ere are
	no make-up quizzes.	-			
				•	
	Attendance	. • •	•	it	maione
	Keeping current with the class are the responsibility of the st	dent.	т рагистрац	ing itt chassiooni gisci	13310113
	Statement on Plagiarism and Plagiarism, cheating, and other Board of Regents' Code of Co Handbook Section 5-308. We	er forms of monduct and the	e procedure	s outlined in the NA	U Student
	Arizona Board of Regents' Code of Conduct: http://www.abor.asu.edu/l_the_regents/policymanual/chap5/index.html				
	NAU Student Handbook: http://www4.nau.edu/stulife/h	andbook.htm	<u>1</u>		
	NAU Student Code of Condu- http://www4.nau.edu/stulife/h		e.htm		
	Disciplinary Action:				

	http://www4.nau.edu/stulife/handbookdisciplinary.htm
University	Safe Working and Learning Environment:
Policies:	http://oak.ucc.nau.edu/dam1/Safe%20Policy.htm
	Co. 1. as with Disabilities.
	Students with Disabilities:
	http://www2.nau.edu/dss/
	Institutional Review Board:
	http://www4.nau.edu/ovp/irb/index.htm
	Academic Integrity Guidance:
	http://www.nau.edu/library/information/guides/plagiarism.html
College of	Professional Ethics and Code of Conduct
Engineering	Exceptionally high standards of honor and integrity are fundamental and essential to
and Natural Sciences	the study and practice of engineering. Academic preparation for the profession must
Policies:	be conducted in an atmosphere which fosters these values.
roncies.	be conducted in an acmosphere which resters most resters
	In addition to compliance with the Student Code of Conduct and Policy that apply to all students at NAU, engineering students are expected to conduct themselves professionally. Violation of the National Society of Professional Engineers (NSPE) Code of Ethics, found at http://www.nspe.org/ethics/eh1-code.asp or the Association of Computing Machinery (ACM) Code of Ethics and Professional Conduct, found at http://www.acm.org/constitution/code.html may lead to dismissal from the College's academic programs.
	Violations of any of these codes will be handled as detailed in the publications listed above, and will be documented in the student's advisement file.
	Faculty members may ask students to affirm in writing that they have neither given nor received unauthorized aid on an examination or assignment.

Department of Mathematics & Statistics

Adel Mathematics Building PO Box 5717 Flagstaff, AZ 86011-5717 928-523-3481 928-523-5847 fax www.math.nau.edu

MEMORANDUM

TO:

Barry Lutz

FROM:

Terence Blows, Curriculum Chair, Department of Mathematics and Statistics

DATE:

November 20th, 2006

SUBJECT:

Summary of Curriculum Materials

Undergraduate

- New Course STA 275: Statistical Analysis calculus-based version of STA 270 for majors in Mathematics and Statistics. Course is similar to CENE 225. A letter of support from Debra Larson has been requested.
- 2. New Course STA 477: Time Series Analysis. (Major course)
- 3. Course Change STA 270 adding 'Credit cannot be earned in both STA 270 and 275'
- 4. Course Change STA 371. Prerequisite changed from STA 270 to STA 270 or 275
- 5. Course Change STA 471. Prerequisite changed from MAT 136 and STA 270 to MAT 136 and STA 270 or 275
- 6. Course Change STA 472. Prerequisite changed from STA 270 to STA 270 or 275
- 7. Course Change STA 473C. Prerequisite changed from MAT 137 to MAT 238
- 8. Program Change BSEd in Mathematics. Requirement of STA 270 changed to STA 275
- 9. Program Change BS in Mathematics Extended Major: Actuarial Science and Statistics emphases. Requirement of STA 270 changed to STA 270 or 275; STA 477 added as a requirement.
- 10. Program Change Mathematics Secondary Education Minor. STA 270 changed to STA 270 or 275
- 11. Program Change –Statistics Minor. STA 270 changed to STA 270 or 275; STA 477 added to list of possible courses.
- 12. Program Change Mathematics Minor. Increase of 1 hour in the minor to reflect previous increase of 1 hour in MAT 238. Listing of MAT 335 alongside three other courses that are more theoretical and less computational in nature.

There are some typos in the current catalog in which total hours for the BSEd and BS Extended do not add up. These are corrected in the paperwork of items 8 and 9.

Graduate

- 13. New Course. The university course line XXX 597 is activated for the STA prefix.
- 14. Course Deletion STA 579, introduced solely for the now defunct Master of Public Health. E-mail from John Sciacca included in hard copy set of forms.
- 15. Course Change. MAT 602. Prerequisite changed from MAT 507 to Instructor Consent.
- 16. Program Change M.A.T. in Mathematics changed to explicitly require at least 3 pedagogy-content 'connections' courses. (MAT 507 and at least 2 of the other three)



Proposal for New Course

1. Is this course being proposed for Liberal Studies designation? Yes No If yes, route completed form to Liberal Studies.
2. New course effective beginning what term and year? (ex. Spring 2008, Summer 2008) Fall 2007 See effective dates schedule.
Engineering and Natural 3. College Sciences 4. Academic Unit Mathematics and Statistics
5. Course subject/catalog number STA 275 6. Units 3
7. Co-convened with 7a. Date approved by UGC (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
8. Cross-listed with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
9. Long course title Statistical analysis (max 100 characters including spaces)
10. Short course title (max. 30 characters including spaces) Statistical Analysis
11. Catalog course description (max. 30 words, excluding requisites).
A calculus-based applied statistics course. Descriptive statistics; discrete and continuous random variables; probability istributions including binomial, Poisson, normal and t-distributions; one- and two-sample hypothesis tests and confidence intervals; simple linear regression and correlation. Credit cannot be earned in both STA 270 and STA 275
12. Grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)
13. Is this a topics course? Yes \(\subseteq \text{No } \subseteq \)
14. May course be repeated for additional units? a. If yes, maximum units allowed? b. If yes, may course be repeated for additional units in the same term? (ex. PES 100) yes no no yes no
15. Please check ONE of the following that most appropriately describes the course:
Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research Research
Seminar Field Studies Independent Study Activity Supervision
16. Prerequisites (must be completed <i>before</i> proposed course) (MAT 137 or MAT 131) with grade greater than or equal to C
17. Corequisites (must be completed with proposed course)
f course has no requisites, will all sections of the course require (If course has pre or co requisite, skip to question 19):
instructor consent department consent no consent no consent

1

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19. Is the course needed for a plan of study (major, minor, certificate)? Name of new plan? BS Ed Mathematics; BS Mathematics—Extended: Actuarial Science and Statistics subplans.
Note: A new plan or plan change form must be submitted with this request.
20. Does course duplicate content of existing courses within or outside of your college? yes on o If yes, list any courses this course may have duplicative material with and estimate percentage of duplication:
There is considerable duplication of applied statistics content with STA 270; however the context is very different and the course is taught at an altogether higher level. Students may only earn credit in one of STA 270 and 275 and so a given student will not see a duplication of material. The Department of Mathematics and Statistics will offer one section of STA 275 each year and will teach one section less of STA 270.
There is duplication of material with CENE 225, a calculus-based applied statistics course offered for Engineering majors. The emphasis may be a little different, with perhaps a greater theoretical base in the STA 275 course, but the material (and potentially the textbook) is generally similar. As STA 275 targets mathematics majors there is no impact on Civil and Environmental Engineering.
Please attach letters of support from each department whose course is listed above.
21. Will this course affect other academic plans, academic units, or enrollment? yes no If yes, explain in justification and provide supporting documentation from the affected departments.
22. Is a potential equivalent course offered at a community college (lower division only)? yes no If yes, does it require listing in the Course Equivalency Guide? yes no Please list, if known, the institution, subject/catalog number of the course.
23. Justification for new course, including unique features if applicable. (Attach proposed syllabus in the approved university format).
Currently majors in the BS Ed in Mathematics Education and the BS Mathematics - Extended take the same applied statistics course as other students at NAU. Much time is spent on things which are quite simple for mathematics majors (creation of histograms and statistical charts, interpretation of statistical tables, mechanics of computation). Introducing a separate course for our majors will allow time to better spent on the theoretical foundations of the methods of applied statistics through more careful development of probability, some of which requires knowledge of calculus. The stronger foundation will benefit all our majors (some of our undergraduate programs do not allow STA 270 to count towards the major) and in particular will improve the knowledge base of BS Ed students for which this serves as the only statistics course in the major.
Brent Burch, John Hagood, Michael Ratliff, Roy St. Laurent, Rich Turek, Phil Turk, Jin Wang.
25. If course will require additional faculty, space, or equipment, how will these requirements be satisfied?
26. Will present library holdings support this course? yes \(\sigma\) no \(\sigma\)

If the course being submitted for approval is <u>NOT a LIBERAL STUDIES</u> course, please go to step 42.

LIBERAL STUDIES ONLY

Contact name:	Contact email:
Dept. Chair name:	Dept. Chair email:
College Contact name :	College Contact email:
27. This course is a Single section	☐ Multi-section
28. List names of faculty who may teach this course	<u> </u>
29. Section enrollment cap:	
If this course is being submitted for approval as a OR	new <u>LIBERAL STUDIES</u> course, please complete questions 30-33.
	new <u>JUNIOR LEVEL WRITING</u> course, please complete questions 37-38.
OR	, , , , , , , , , , , , , , , , , , ,
	new SENIOR CAPSTONE course, please complete questions 39-41.
	-
NEW LIBERAL STUDIES COURSE	
30. Thematic Focus (check all that apply): <i>If a topi</i> Environmental Consciousness Technolog	gy and Its Impact Valuing the Diversity of Human Experience
31. Distribution Block (check one): <i>If a topics cou</i> Aesthetic and Humanistic Inquiry Science/Applied Science Social and I	ltural Understanding
32. Skills (check two): If a topics course, must appear	ly to <u>ALL</u> sections.
Creative Thinking Critical Reading Thinking	Effective Oral Communication
Ethical Reasoning Quantitative/Spatial A	analysis Scientific Inquiry Use of Technology
33. Is this a topics course? Yes No If YES, please complete questions 34-36. If No	O, please go to question 42.
TOPICS COURSE ONLY	
34. Identify the <u>Student Learning Outcomes</u> that will	ll be found in <u>ALL</u> topic syllabi offered under this course number.
35. Explain by what method(s) Student Learning Ou	atcomes will be <u>assessed</u> in <u>ALL</u> topic syllabi offered under this course number.
36. Please attach an example of a Topic Syllabus of	fered under this course number.

GO TO question 42/06

37. To which degree programs offered by your department/academic	ic unit does this proposal apply?
Do you intend to offer ABC 300 and ABC 300W? yes [] If no, please submit a course delete form for the ABC 300.	no [
GO TO question 42	
NEW SENIOR CAPSTONE COURSE (refer to question 19)	
39. To which degree programs offered by your department/academic	ic unit does this proposal apply?
40. Does this proposal replace or modify an existing course or expe If yes, which course(s)?	rience? yes no
41. Do you intend to offer ABC 400 and ABC 400C? yes I fno, please submit a course delete form for the ABC 400.	no 🗍
42. Approvals	
Janet M. McShane Department Chair (if appropriate)	20 Nov 2006
of college curriculum committee	12 - 3 - 2006 Date
Dean of college	7 Dec 06
For Committees use only	
For Liberal Studies Committee	Date
Action taken: Approved as submitted	Approved as modified
Qon Bel	1116/07
For University Curriculum Committee	Date !
Action taken:	
Approved as submitted	Approved as modified

NEW JUNIOR LEVEL WRITING COURSE (refer to question 19)

STA 275: STATISTICAL ANALYSIS

General Information: STA 275 is a three-credit hour course meeting 150 minutes each week.

Prerequisites: A grade of *C* or better in MAT 137.

Catalog Description: STA 275 Statistics (3). A calculus-based applied statistics course. Descriptive statistics; discrete and continuous random variables; probability distributions including binomial, Poisson, normal and *t* distributions; one- and two-sample hypothesis tests and confidence intervals; simple linear regression and correlation. Credit cannot be earned in both STA 270 and STA 275.

Course Description: Statistics is the discipline that seeks to quantify uncertainty in decision making via data collection and analysis. As such, statistics is the cornerstone of much of scientific inquiry. STA 275 will focus on the use of data to draw conclusions in the face of uncertainty. We will develop and discuss data gathering, data analysis tools, the concept of a random variable, estimation and the evaluation of scientific hypotheses. The focus will be on the use of statistics particularly in science and engineering applications, using the tools of calculus to develop a deeper understanding of the material.

Student Learning Outcomes

Upon successful completion of the course, the student will be able to:

- 1. Understand and explain simple statistical methods commonly used in scientific research studies using correct statistical notation and appropriate language.
- 2. Construct informative graphical and numerical summaries of data appropriate for the type of data and the context in which it was collected, and interpret these summaries in written terms appropriate to the context in which the data was collected.
- 3. Understand the concept of a random variable; recognize standard probability distributions and be able to calculate probabilities for such random variables.
- 4. Recognize and carry out parameter estimation, construction of including confidence intervals, and hypothesis testing procedures both by hand and with the aid of a statistical calculator or using a statistical software program.
- 5. Understand the formalism of parameter estimation and hypothesis testing and how it relates to, supports, and advances the scientific method.
- 6. Properly apply the formalism of parameter estimation and hypothesis testing to scientific inquiry by appropriate statistical analysis of collected data.
- 7. Understand the limitations of the statistical methodology learned in the course, and be able to recognize problems in which the statistical methods learned are not appropriate.

Course Structure and Approach: The course will provide students with opportunities to learn about the methodology of statistics through a combination of lectures, discussions, individual and group projects, and computer laboratory activities according to instructor design and preference. Readings in the textbook will provide basic information to assist student learning. **Textbook**: A textbook is required for this course. There are many possible textbooks available, including:

 $(1) \textit{ Probability \& Statistics for Engineering \& \textit{ the Sciences}}, 6^{th} \textit{ ed., J.L. Devore, Duxbury, 2004}.$

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- (2) Statistics for Engineers & Scientists, 2nd ed., W. Navidi, McGraw-Hill, 2007.
- (3) Probability & Statistics for Engineers & Scientists, 7th ed., R.E. Walpole, R.H. Myers, S.L. Myers & K. Ye, Prentice-Hall, 2002.

Calculator: A calculator is required to complete homework problems and for use in examinations. An excellent choice for this course is the TI-83 statistical calculator. [Note: In some sections (as indicated in the class schedule) the TI-83 calculator or its equivalent will be required.]

Computer Lab: The use of technology for data display, manipulation and calculation is a vital part of modern statistical analysis. So that you may become familiar with statistical software, one or more class sessions will be held in a computer lab in the Department of Mathematics & Statistics. There you will learn how to use a statistical software package [e.g., JMP]. The use of statistical software will be required to complete technology-based assignments and may also be used in completing other homework as indicated by your instructor.

Course Outline / Timeline

- 1. Descriptive Statistics 3 days
 Populations and samples; data collection; frequency distributions; graphical techniques for summarizing data; numerical measures of average and variation.
- 2. Probability 16 days
 Sample spaces, axioms of probability, counting principles, conditional probability & Bayes theorem. Discrete random variables; Binomial, Hypergeometric, Negative Binomial, and Poisson distributions. Continuous random variables; Uniform, Normal, Exponential, and t distributions.
- 3. Inferential Statistics One Population 10 days
 The nature of inference; point estimation and confidence intervals for a population mean;
 point estimation and confidence intervals for a population proportion. The nature of
 hypothesis tests; hypothesis tests concerning a population mean; and hypothesis tests
 concerning a population proportion.
- 4. Inferential Statistics Two Populations 6 days
 Confidence intervals and hypothesis tests concerning two population means; independent samples; paired samples. Confidence intervals and hypothesis tests concerning two population proportions
- 5. Simple linear regression 4 days
 The simple linear regression model. Estimating the model parameters. Inference about the slope and model prediction. Correlation.
- 6. Exams and computer laboratory activities 6 days

Assessment of Student Learning Outcomes

Student progress toward achieving course objectives will be measured in a variety of ways:

- Student understanding of basic concepts and ability to properly apply statistical techniques will be evaluated by some or all of the following: regular homework assignments (at least weekly); quizzes; objective testing throughout the semester; and a comprehensive final examination.
- Student ability to properly use technology (graphing calculators or statistical software) as an
 aid to statistical calculation will be evaluated by special technology-based exercises, and in
 some sections individual projects.

• Student understanding of statistical procedures and ability to correctly interpret and explain them will be evaluated through class discussion, small group activities and test questions requiring short written responses.

Assessment will include a minimum of three in-class exams and a comprehensive final examination worth at least 25% of the overall grade. In addition, individual sections will use two or more of the following items: (a) collected traditional homework assignments; (b) collected homework requiring the use of statistical software; (c) quizzes; (d) group or individual projects requiring the collection of data, data analysis (using statistical software) and a written report.

Assignments, Examinations, Grading, and Other Policies

Hourly examinations and the comprehensive final exam. The emphasis in this course is on gaining a conceptual understanding and skill in the use of proper statistical procedures, not on memorization of formulas. Thus you will be allowed to bring a formula sheet with you for each exam. Examinations will consist of word problems requiring you to apply correct statistical procedures and interpret the results in the context of the problem. This will require the understanding of statistical terminology and the ability to convey results using correct technical English. For some problems, output from statistical software may be provided and you will be required to interpret the output in an appropriate manner. A portion (less than 20%) of the each examination may consist of multiple choice or true/false questions used to assess understanding of fundamental concepts, definitions and principles of statistics.

<u>Homework assignments</u>. Regular written homework assignments will be made requiring you to apply the statistical techniques discussed in class to solving problems. This will require familiarity and understanding of the mechanics of statistical techniques, their conceptual basis, the use of appropriate technology (statistical calculator or software), and the ability to interpret results using everyday language.

Grading System: A standard scale based on total points earned (A: 90% or higher; B: 80-89%, etc.) is suggested as a starting point.

Course Policies: These may vary from instructor to instructor. The following are suggested:

- Make-up tests will not be given except for institutional reasons
- Attendance at all class session is expected.
- Academic dishonesty will not be tolerated.

University policies: Students are responsible for the following University policies: Safe Environment, Students with Disabilities, Institutional Review Board, Academic Integrity, and the Academic Contact Hour Policy. A copy of these policies may be downloaded from the web site http://jan.ucc.nau.edu/academicadmin/policy.doc.

University Curriculum Committee

Proposal for New Course

 Is this course being proposed for Liberal Studies designation? Yes □ No ☑ If yes, route completed form to Liberal Studies. 		
2. New course effective beginning what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007		
Engineering and Natural 3. College Sciences 4. Academic Unit Mathematics and Statistics		
5. Course subject/catalog number STA 477 6. Units 3		
7. Co-convened with 7a. Date approved by UGC (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)		
8. Cross-listed with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)		
9. Long course title Time Series Analysis (max 100 characters including spaces)		
10. Short course title (max. 30 characters including spaces) Time Series Analysis		
11. Catalog course description (max. 30 words, excluding requisites).		
Methods for analyzing time series including: decomposition of time series, seasonal adjustment methods, index numbers; precasting including causal models, trend models, smoothing models, autoregressive models, moving average and integrated models.		
12. Grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)		
13. Is this a topics course? Yes ☐ No ☒		
14. May course be repeated for additional units? a. If yes, maximum units allowed? b. If yes, may course be repeated for additional units in the same term? (ex. PES 100) yes no no yes no yes		
15. Please check ONE of the following that most appropriately describes the course:		
Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research		
Seminar Field Studies Independent Study Activity Supervision		
16. Prerequisites (must be completed before proposed course) STA 471 with grade greater than or equal to C		
17. Corequisites (must be completed <i>with</i> proposed course)		
1° If course has no requisites, will all sections of the course require (If course has pre or co requisite, skip to question 19):		
instructor consent department consent no consent		

19. Is the course needed for a plan of study (major, minor, certificate)? yes 🔀 no 🔲 Name of new plan? BS Mathematics – Extended (Actuarial Science and Statistics subplans)		
Note: A new plan or plan change form must be submitted with this request.		
. Joes course duplicate content of existing courses within or outside of your college? yes \(\sum \) no \(\sum \) If yes, list any courses this course may have duplicative material with and estimate percentage of duplication:		
Please attach letters of support from each department whose course is listed above.		
21. Will this course affect other academic plans, academic units, or enrollment? yes no If yes, explain in justification and provide supporting documentation from the affected departments.		
22. Is a potential equivalent course offered at a community college (lower division only)? yes no If yes, does it require listing in the <u>Course Equivalency Guide</u> ? yes no Please list, if known, the institution, subject/catalog number of the course.		
23. Justification for new course, including unique features if applicable. (Attach proposed syllabus in the approved university format).		
The area of time series analysis is important in both statistics and actuarial science. It forms part of a professional exam offered by the Society of Actuaries. Our lack of coursework in this area has disadvantaged our actuarial science majors. The presence of this course will potentially allow our students to substitute STA 471/477 for the professional exam and may serve as a recruitment tool for us. [This substitution must be approved by the Society of Actuaries.] More generally, the analysis of time series data is useful in many disciplines and the forecasting of future trends is important in, for example, a business setting. The course will therefore serve to enhance the resumes of our statistics majors.		
Brent Burch, Roy St. Laurent, 24. Names of current faculty qualified to teach this course Phil Turk, Jin Wang		
25. If course will require additional faculty, space, or equipment, how will these requirements be satisfied?		
26. Will present library holdings support this course? yes 🔲 no 🗌		

LIBERAL STUDIES ONLY

Contact name:	Contact email:	
Dept. Chair name:	Dept. Chair email:	
College Contact name :	College Contact email:	
 27. This course is a Single section 28. List names of faculty who may teach this course: 29. Section enrollment cap: 	Multi-section	
29. Section enforment cap.		
If this course is being submitted for approval as a new <u>LIBERAL STUDIES</u> course, please complete questions 30-33. OR If this course is being submitted for approval as a new <u>JUNIOR LEVEL WRITING</u> course, please complete questions 37-38. OR		
if this course is being submitted for approval as a	new <u>SENIOR CAPSTONE</u> course, please complete questions 39-41.	
31. Distribution Block (check one): If a topics cour	y and Its Impact Valuing the Diversity of Human Experience See, must apply to ALL sections. Sural Understanding Lab Science	
32. Skills (check two): If a topics course, must apply	y to <u>ALL</u> sections.	
Creative Thinking Critical Reading Thinking Critical Reading Quantitative/Spatial Ar	Effective Oral Communication	
33. Is this a topics course? Yes No In If YES, please complete questions 34-36. If NO	, please go to question 42.	
TOPICS COURSE ONLY		
	be found in <u>ALL</u> topic syllabi offered under this course number.	
35. Explain by what method(s) Student Learning Out	comes will be assessed in ALL topic syllabi offered under this course number.	
36 Pleace attach an example of a Tonic Sullabus offe	ored under this course number	

GO TO questing 42/06

NEW JUNIOR LEVEL WRITING COURSE (refer to question 19)	1
37. To which degree programs offered by your department/academic u	unit does this proposal apply?
Do you intend to offer ABC 300 and ABC 300W? yes If no, please submit a course delete form for the ABC 300.	по
GO TO question 42	
NEW SENIOR CAPSTONE COURSE (refer to question 19)	
39. To which degree programs offered by your department/academic u	unit does this proposal apply?
40. Does this proposal replace or modify an existing course or experiently fyes, which course(s)?	nce? yes \(\square \) no \(\square \)
41. Do you intend to offer ABC 400 and ABC 400C? yes no If no, please submit a course delete form for the ABC 400.	
42. Approvals	
Ganct M. Mc Shane	20 NN 06 Date
Department Chair (if appropriate) Of college curriculum committee	(26) 2006 . Date
Jean of college	7 Dec 06
S .	
For Committees use only	
For Liberal Studies Committee	Date
Action taken: Approved as submitted	Approved as modified
For University Curriculum Committee	111007
of Onversity Curriculum Commutee	vac .
Action taken:	
Approved as submitted	Approved as modified

STA 477: TIME SERIES ANALYSIS

General Information: STA 477 is a three-credit hour course meeting 150 minutes each week.

Prerequisites: A grade of C or better in MAT 471.

Catalog Description: Methods for analyzing time series including: decomposition of time series, seasonal adjustment methods, index numbers; forecasting models including causal models, trend models, smoothing models, autoregressive models, moving average and integrated models. Prerequisite: STA 471 with grade greater than or equal to C

Course Description: A time series is a collection of observations made sequentially through time. Examples occur in a variety of fields, ranging from economics to engineering. The particular essence of time series analysis is its concern with the nature of dependence among the members of the sequence of random variables. Specific methods of analyzing time series have been developed and constitute an important area of statistics. The methods covered in the course include: decomposition of time series, seasonal adjustment methods, index numbers; forecasting models including causal models, trend models, smoothing models, autoregressive models, moving average and integrated models.

Student Learning Outcomes

Upon successful completion of the course students will be able to:

- 1. Understand the important features of a given time series and be able to extract these in order to build a model.
- 2. Understand the definitions of a wide variety of models, and be able to put in place the necessary steps to build such models.
- 3. Be able to calculate things such as autocorrelation functions, regions of admissible parameter values, forecasts, etc.
- 4. Be able to apply statistical software package(s) in the analysis of time series.
- 5. Be able to interpret the output of statistical software package(s) in the analysis of time series.

Course Structure and Approach: The class will meet for three 50-minute periods per week for the fifteen week semester. Class meetings will consist of lectures, discussions and demonstration and use of statistical software.

Textbook: A textbook is required for this course. There are many possible textbooks available, including:

The Analysis of Time Series: An Introduction, Chris Chatfield, 6^{th} ed., (2004).

Topics will be selected from Chapters 1-5, 13 and 14 of the text. If time permits, further material may be selected from Chapter 8.

Computer Lab:

A statistical software package (e.g. R) will be used in lectures and instructions to its use provided in handouts throughout the course. Computer-related code and output will be discussed. The students will be required to use the package for homework assignments and exams.

Course Outline / Timeline

- 1. Introduction 3 days
 - Some Representative Time Series.
 - Terminology
 - Objectiveness of Time Series Analysis
 - Problems of Autocorrelation
- 2. Simple Descriptive Techniques 10 days
 - Types of Variation
 - Stationary Time Series
 - The Time Plot
 - Transformations
 - Estimation and Elimination of Trend in the Absence of Seasonality
 - Estimation and Elimination of Trend and Seasonality
 - Tests of Randomness
 - Handling Real Data
- 3. Some Time Series Models 19 days
 - Stochastic Processes and Their Properties
 - Stationary Processes and Autocorrelation
 - Autocorrelation and the Correlogram
 - Some Properties of the Population ACV.F and the Population AC.F
 - Moving Average Process MA(q)
 - Autoregressive Processes AR(p)
 - Autoregressive Moving Average Model ARMA (1,1)
- 4. Estimation of the Mean and the ACV.F- 4 days
 - Estimation of the Mean
 - Estimation of the Populations ACV.F and AC.F
- 5. ARMA models 4 days
 - ARMA Processes
 - AC.F and PAC.F of ARMA(p,q)
 - Forecasting ARMA Processes
- 6. Integrated ARMA or ARIMA Models 3 days
 - Building ARIMA Models
 - Seasonal ARMA Model
 - Mixed Seasonal ARMA
- 7. Modeling 2 days
 - Assessment
 - Selection

Assessment of Student Learning Outcomes

Student progress toward achieving course objectives will be measured in a variety of ways:

- Student understanding of basic concepts and ability to properly apply the appropriate model will be evaluated by some or all of the following: regular homework assignments (at least weekly); tests and quizzes; and a comprehensive final examination.
- Student ability to properly use technology (statistical software package(s)) in the analysis of time series will be evaluated by special technology-based exercises on homework assignments and, possibly, in take-home portions of exams.
- Student understanding of methodology and ability to correctly interpret and explain concepts related to time series will be evaluated through class discussion, homework problems and test questions.

The precise nature of the assessments may vary from instructor to instructor. The following is one possible scheme:

- A number of homework assignments will be given during the semester. They will be weighted equally and may be done in groups.
- Two exams will be given a midterm and a comprehensive final. Successful completion of the final is necessary to pass the class. The in-class component of the exams are cosed book although students will be provided with necessary formulas. The format for the in-class portion of the exams will range from multiple choice, short answer and some longer 'show your work' problems.
- Take-home components of the two exams will be constructed in a similar way to homework assignments and will emphasize computer application. But in contrast to homework assignments, these take-home components of the exams are to be done independently using only class notes and the textbook.

Grading System: This may vary from instructor to instructor, but a standard scale based on total points earned (A: 90% or higher; B: 80-89%, etc.) is suggested as a starting point.

Course Policies: These may vary from instructor to instructor. The following are suggested:

- Make-up tests will not be given except for institutional reasons
- Attendance at all class session is expected.
- Academic dishonesty will not be tolerated.

University policies: Students are responsible for the following University policies: Safe Environment, Students with Disabilities, Institutional Review Board, Academic Integrity, and the Academic Contact Hour Policy. A copy of these policies may be downloaded from the web site http://ian.ucc.nau.edu/academicadmin/policy.doc.

University Curriculum Committee

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both		
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007		
3. College Engineering and Natural Sciences 4. Academic Unit Mathematics and Statistics		
5. Current course subject/catalog number STA 270		
6. Current catalog title, course description, and units. (Copy and paste from <u>current on-line academic</u> <u>catalog</u>).		
STA 270 APPLIED STATISTICS (3)		
Graphical and quantitative description of data; binomial, normal, and t distributions; one- and two-sample hypothesis tests and confidence intervals; simple linear regression and correlation. Prerequisite: MAT 102X with a grade greater than or equal to C or Math Placement 46 or International Student Group SAS.		
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?		
8. Is course an elective? Or required for an academic plan/subplan? BSF Forestry, BS Environmental Science,		
If required, for what academic plan/subplan? etc. If required, also submit <i>Proposal for New Plan or Plan Change</i> .		
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes		
10. Does this change affect community college articulation? yes \(\sum \no \omega\) no \(\omega\) If yes, explain how in the justification and provide supporting documentation from the affected institutions.		
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? yes no I		
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?		

FOR SECTION 11 ONLY COMPLETE WHAT IS CHANGING.

11.	a. Proposed course subject /catalog number b. Proposed units		
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No		
what is changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.		
If			
information	d. Proposed to co-convene with Date approved by UGC		
is remaining the same, leave the	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)		
section	e. Proposed to cross-list with		
blank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)		
	f. Proposed long course title		
	(max 100 characters including spaces)		
7	g. Proposed short course title		
	(max 30 characters including spaces)		
	h. Proposed catalog course description (max. 30 words, excluding requisites)		
	Graphical and quantitative description of data; binomial, normal, and t distributions; one- and		
	two-sample hypothesis tests and confidence intervals; simple linear regression and correlation.		
	Credit cannot be earned in both STA 270 and STA 275. Prerequisite: MAT 102X with a		
	grade greater than or equal to C or Math Placement 46 or International Student Group SAS		
	i. Proposed grading option: Letter grade Pass/Fail or Both		
	(If both, the course may only be offered one way for each respective section.)		
	(1) both, the course may only be offered one way for each respective sections,		
	j. May course be repeated for additional units? yes no		
	j.1. If yes, maximum units allowed?		
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)		
	yes no		
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):		
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research		
	Seminar Field Studies Independent Study Activity Supervision		
	1. Proposed prerequisites (must be completed before)		
	m. Proposed corequisites (must be completed with)		
- <i>y</i>	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)		
	Instructor consent Department consent No consent		

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

The Department has proposed a new course STA 275, similar to STA 270, for its majors. This will have a stronger theoretical base than STA 270 but there will be a substantial overlap of material.

	13. Approvals	
	Janet M. Mc Shane	20 NOV 2006
	Department Chair/ Unit Head (if appropriate)	Date
	Of prime of all delimeter	12-17-2006
	Chair of college curriculum committee	Date
1	It duenneke	7 Dec 06
\mathcal{I}	Dearr of college	Date
12	For Committee use only	1116107
	For University Curriculum Committee	Date
	Action taken: approved as submitted	_ approved as modified
	Note: Submit original to associate provost's office. That office will provide cop	нез то сопеде исин, аврантели спин, или мешистие туонтиноп Озучес.

University Curriculum Committee

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both
Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College Engineering and Natural Sciences 4. Academic Unit Mathematics and Statistics
5. Current course subject/catalog number STA 371
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
STA 371 INTERMEDIATE STATISTICS (3)
Applies statistical methods to real world problems. Simple and multiple regression, ANOVA, experimental design, and categorical data analysis. Designing studies and collecting data, analyzing information, and writing reports. Prerequisite: STA 270 with grade greater than or equal to C
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?
8. Is course an elective? or required for an academic plan/subplan? BS - Mathematics (Extended Major):
If required, for what academic plan/subplan? Statistics subplan; Statistics Minor If required, also submit Proposal for New Plan or Plan Change.
 Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes no If yes, explain in the justification and provide supporting documentation from the affected departments.
10. Does this change affect community college articulation? yes \(\square\) no \(\square\) If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? yes no I
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

FOR SECTION 11 ONLY COMPLETE WHAT IS CHANGING.

11.	a. Proposed course subject /catalog number b. Proposed units		
Only fill in what is	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog		
changing.	number change.		
If			
information is remaining the same,	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)		
eave the section olank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)		
	f. Proposed long course title (max 100 characters including spaces)		
•	g. Proposed short course title (max 30 characters including spaces)		
	h. Proposed catalog course description (max. 30 words, excluding requisites)		
	i. Proposed grading option: Letter grade		
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):		
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research		
	Seminar Field Studies Independent Study Activity Supervision		
	1. Proposed prerequisites (must be completed before) (STA 270 or STA 275) with grades greater than or equal to C		
	m. Proposed corequisites (must be completed with)		
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent		

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

The Department has proposed a new course, similar to STA 270, for its majors. This will have a stronger theoretical base than STA 270 and will serve as an alternate prerequisite for STA 371.

Department Chair/ Unit Head (if appropriate)	20 NW 2006
Department Chair/ Unit Head (if appropriate)	Date
Grown & Gueldhord	ORC 12006
Chair of college curriculum committee	Date
1/ LF Luenneke	7 Dec 06
Dean of college	Date
For Committee use only	1/16/07
For University Curriculum Committee	Date
Action taken: approved as submitted	_ approved as modified

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

13. Approvals

University Curriculum Committee

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both	
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007	
3. College Engineering and Natural Sciences 4. Academic Unit Mathematics and Statistics	
5. Current course subject/catalog number STA 471	
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).	
STA 471 REGRESSION ANALYSIS (3)	
Simple linear, multiple linear, curvilinear, and multiple curvilinear regression models. Simple, multiple, and partial correlation. Variable selection techniques. Prerequisite: STA 270 and (MAT 136 or MAT 136H) with grades greater that equal to C	ın or
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?	
8. Is course an elective?	
If required, also submit Proposal for New Plan or Plan Change.	
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes on	
Environmental Science is affected but the change is only to add an alternate course as a prerequisite.	
10. Does this change affect community college articulation? yes \(\sum_\) no \(\sum_\) If yes, explain how in the justification and provide supporting documentation from the affected institutions.	
Is the course a Common Course as defined by your Articulation Task Force? yes	
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?	

FOR SECTION 11 ONLY COMPLETE WHAT IS CHANGING.

11.	a. Proposed course subject /catalog number b. Proposed units
	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog
Only fill in what is	number that needs to be moved? Yes No
what is changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog
0 0	number change.
lf information	d. Proposed to co-convene with Date approved by UGC
is remaining	(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
the same,	(man oo approved of a primary o
leave the section	e. Proposed to cross-list with
olank.	(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
_	(max 100 characters including spaces)
	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	n. 1 toposed eathing bourse description (max. 50 words, excitating requisitors)
	i. Proposed grading option: Letter grade Pass/Fail or Both
	(If both, the course may only be offered one way for each respective section.)
	(1) both, the course may only be offered one way for each respective sections,
	j. May course be repeated for additional units? yes no no
	j.1. If yes, maximum units allowed?
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100)
	yes no
	, et <u> </u>
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Lecture w/o dint embedded lab Lecture only Lab only Chinear Research
	Seminar Field Studies Independent Study Activity Supervision
	(STA 270 or STA 275) and (MAT 136 or
	MAT 136H) with grades greater than or equal
	1. Proposed prerequisites (must be completed before) to C
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12)
	Instructor consent Department consent No consent

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

The Department has proposed a new course, similar to STA 270, for its majors. This will have a stronger theoretical base than STA 270 and will serve as an alternate prerequisite for STA 471.

Department Chair/ Unit Head (if appropriate)	20 Nov. 2006
Department Chair/ Unit Head (if appropriate)	Date
alema & Kildilarel	12-07-2006
Chair of college curriculum committee	Date
Let Suemake	7 Dec 06
Dean of college	Date
For Committee use only Ron Sal	1/1/d07
For University Curriculum Committee	Date 3
Action taken: approved as submitted	approved as modified

Note: Submit original to associate provost's office. That office will provide copies to college dean, department chair, and Academic Information Office.

13. Approvals

University Curriculum Committee

PROPOSAL FOR COURSE CHANGE

1. Is this a Liberal Studies or Diversity Course? Liberal Studies Diversity Both
2. Course change effective beginning of what term and year? (ex. Spring 2008, Summer 2008) See effective dates schedule. Fall 2007
3. College Engineering and Natural Sciences 4. Academic Unit Mathematics and Statistics
5. Current course subject/catalog number STA 472
6. Current catalog title, course description, and units. (Copy and paste from current on-line academic catalog).
STA 472 NONPARAMETRIC STATISTICS (3)
Surveys nonparametric procedures, including binomial, Mann-Whitney, Wilcoxon, Kruskal-Wallis, Friedman, Kolmogorov-Smirnov, and chi-square tests; comparisons to parametric techniques. Prerequisite: STA 270 with grade greater than or equal to C
7. Is course currently cross-listed or co-convened? yes no If yes, list course Will this continue?
8. Is course an elective?
If required, also submit Proposal for New Plan or Plan Change.
9. Will other courses or academic units, be affected by this change? (Consider prerequisites, degree requirements, etc.) yes
Environmental Science is affected but the change is only to add an alternate course as a prerequisite.
10. Does this change affect community college articulation? yes \(\sum \no \omega\) no \(\omega\) If yes, explain how in the justification and provide supporting documentation from the affected institutions.
Is the course a Common Course as defined by your Articulation Task Force? yes no If yes, has the change been approved by the Articulation Task Force? yes no I
If this course has been listed in the <u>Course Equivalency Guide</u> , should that listing be left as is, or be revised? If revised, how should it be revised?

FOR SECTION 11 ONLY COMPLETE WHAT IS CHANGING.

11.	a. Proposed course subject /catalog number b. Proposed units
Only fill in	c. If subject/catalog number change, is there a course fee attached to the current subject/catalog number that needs to be moved? Yes No
what is changing.	If yes, please attach a Justification Form for Instructional Fees indicating the new course subject/catalog number change.
If	d. Proposed to co-convene with Date approved by UGC
information is remaining the same,	d. Proposed to co-convene with (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
leave the section blank.	e. Proposed to cross-list with (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
	f. Proposed long course title
_	(max 100 characters including spaces)
7	g. Proposed short course title
	(max 30 characters including spaces)
	h. Proposed catalog course description (max. 30 words, excluding requisites)
	i. Proposed grading option: Letter grade Pass/Fail or Both (If both, the course may only be offered one way for each respective section.)
	j. May course be repeated for <i>additional</i> units? yes no i.1. If yes, maximum units allowed?
	j.2. If yes, may course be repeated for additional units in the same term? (ex. BIO 300, PES 100) yes no
	k. Please check ONE of the following that most appropriately describes the proposed course change(s):
	Lecture w/0 unit embedded lab Lecture only Lab only Clinical Research
	Seminar Field Studies Independent Study Activity Supervision
	1. Proposed prerequisites (must be completed before) (STA 270 or STA 275) with grade greater than or equal to C
	m. Proposed corequisites (must be completed with)
	n. If course has no requisites, will all sections of the course require: (If course has pre or co requisite, skip to question 12) Instructor consent Department consent No consent

12. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

The Department has proposed a new course, similar to STA 270, for its majors. This will have a stronger theoretical base than STA 270 and will serve as an alternate prerequisite for STA 472.

13. Approvals	
Jonet M. McShane	20 Nov 2006
Department Chair/ Unit Head (if appropriate)	Date
Thum 1 Willehoult	12-07-06
Chair of college curriculum committee	Date
16 La Suenneke	7 Dec 06
Dean of college	Date
For Committee use only	1/14/07
For University Curriculum Committee	'Date
Action taken: approved as submitted	approved as modified
Note: Submit original to associate provost's office. That office will provide of	copies to college dean, department chair, and Academic Information Office.

UNIVERSITY CURRICULUM COMMITTEE

PROP	OSAL FOR NEW ACADEMIC PLA	N, PLAN CHANGE, OR PLAN DELETION	
1. College	Engineering and Natural Sciences	2. Academic Unit _M	1athematics and Statistics
3. Academic Plan Name	B.S.Ed. Mathematics- Secondary	4. Subplan (if applicable)?	
5. Effective Da	te FALL 2007		
6. Is this propos (<u>Please refer to Plan</u>			☐ Plan Deletion
<u>definitions</u>)	New Subplan	Subplan Change	Subplan Deletion
7.			
column. Please current on line : (http://www4.nau.edn Be sure you inc plan change	ges, place the existing catalog text in this copy and paste the text directly from the academic catalog: \[\frac{\text{Aio}/AcademicCatalog/academiccatalogs.htm}{\text{Div}} \] \[\text{Catalog} \text{ that pertains to this} \] \[\text{leave this column blank.} \]	Show the proposed changes BOLD the changes, to differ changing. (Describe the changed require match those used in the left country the units are not totaled correlative them accordingly.)	rentiate from what is not ements under headings that olumn. Please be aware that if
		D C En Martinaarice	SECONDARY EDUCATION
B.S. ED. MATHEMATICS SECONDARY EDUCATION To earn this degree, you must complete at least 120 units of coursework, which we describe in the sections that follow:		B.S. Ed. MATHEMATICS SECONDARY EDUCATION To earn this degree, you must complete at least 120 units of coursework, which we describe in the sections that follow:	
aware to STA requirer for liber mathem unit ma	32 units of <u>liberal studies requirements</u> Be hat you may not use courses with an MAT prefix to satisfy these liberal studies ments. Please note that the usual 35 units ral studies are reduced to 32 units for natics majors, who are exempted from the 3-thematics foundation requirement.	aware that you may not stated or STA prefix to sating requirements. Please for liberal studies are mathematics majors,	beral studies requirements Be not use courses with an MAT sfy these liberal studies e note that the usual 35 units e reduced to 32 units for who are exempted from the 3-undation requirement.
■ at least	50 units of major requirements	1	

- at least 31 units of teacher-preparation requirements
- elective courses, if needed, to reach an overall total of at least 120 units

Be aware that some courses required for your degree may have prerequisites that you must also take. Check the courses in the appropriate subject. (You may be able to count these prerequisites toward your liberal studies or general elective credit.)

- at least 31 units of teacher-preparation requirements
- elective courses, if needed, to reach an overall total of at least 120 units

Be aware that some courses required for your degree may have prerequisites that you must also take. Check the courses in the appropriate subject. (You may be able to count these prerequisites toward your liberal studies or general elective credit.)

Please note that you must have a grade of C or better in each mathematics or statistics course that you use to fulfill the requirements of this major.

Also be aware that you must complete NAU's diversity requirements by taking two 3-unit courses, one in ethnic diversity and one in global awareness. These courses may be used to meet other requirements within your academic plan if you choose them carefully. Click here for a <u>list of the available diversity</u> courses.

Additionally, be aware that you must have a grade point average of at least 2.5 in all of your NAU coursework in order to graduate. This requirement applies to all B.S.Ed. majors at NAU.

Also note that NAU requires that at least 30 units of the courses you take for your degree must be upperdivision courses (those numbered 300 and above).

Finally, please note that you may be able to use some courses to meet more than one requirement; however, you must still meet the total of at least 120 units to graduate. Contact your advisor for details.

Finally be aware that, for the B.S.Ed. degree, you must have the following:

a grade of at least B for the English foundation requirement (ENG 105 or equivalent) (If you don't receive a 3.0, you may complete an additional writing course, at the 200 level or above, with at least a B, to meet this requirement.)

MAJOR REQUIREMENTS

You must complete the following 50 units:

MAT 136, 137, 226, 301, 318, 365, 401, 402, and 442C and STA 270 (35 units)

CS 122 (3 units) (If you complete a minor or major in computer science, you may add 3 units to your general electives instead.)

MAT 320W, which meets NAU's junior writing requirement (3 units)

MAT 411C or MAT 431C (3 units)

6 additional units of MAT and STA courses numbered 238 or above

TEACHER-PREPARATION REQUIREMENTS

You must complete 31 units of professional courses offered by the College of Education to qualify for certification to teach mathematics in Arizona and most other states.

Click here for more information about <u>Teacher</u>

Please note that you must have a grade of C or better in each mathematics or statistics course that you use to fulfill the requirements of this major.

Also be aware that you must complete NAU's diversity requirements by taking two 3-unit courses, one in ethnic diversity and one in global awareness. These courses may be used to meet other requirements within your academic plan if you choose them carefully. Click here for a <u>list of the available</u> diversity courses.

Additionally, be aware that you must have a grade point average of at least 2.5 in all of your NAU coursework in order to graduate. This requirement applies to all B.S.Ed. majors at NAU.

Also note that NAU requires that at least 30 units of the courses you take for your degree must be upperdivision courses (those numbered 300 and above).

Finally, please note that you may be able to use some courses to meet more than one requirement; however, you must still meet the total of at least 120 units to graduate. Contact your advisor for details.

Finally be aware that, for the B.S.Ed. degree, you must have the following:

a grade of at least B for the English foundation requirement (ENG 105 or equivalent) (If you don't receive a 3.0, you may complete an additional writing course, at the 200 level or above, with at least a B, to meet this requirement.)

MAJOR REQUIREMENTS

You must complete the following 47 units:

- MAT 136, 137, 226, 301, 318, 365, 401, 402, and 442C and STA 275 (3 units)
- CS 122 (3 units) (If you complete a minor or major in computer science, you may add 3 units to your general electives instead.)
- MAT 320W, which meets NAU's junior writing requirement (3 units)
- MAT 411C or MAT 431C (3 units)
- 6 additional units of MAT and STA courses numbered 238 or above

TEACHER-PREPARATION REQUIREMENTS

You must complete 31 units of professional courses offered by the College of Education to qualify for certification to teach mathematics in Arizona and most other states.

<u>Preparation in Secondary Education</u>. You should also receive advisement from the College of Education for this part of your academic plan.

Please note that these 31 units include ECI 495C, which meets NAU's senior capstone requirement. Also note that for the B.S.Ed. in mathematics, you substitute MAT 302 for ECI 308.

GENERAL ELECTIVES

Additional coursework is required, if, after you have met the previously described requirements, you have not yet completed a total of 120 units of credit.

You may take these remaining courses from any academic areas, using these courses to pursue your specific interests and goals. We encourage you to consult with your advisor to select the courses that will be most advantageous to you. (Please note that you may also use prerequisites or transfer credits as electives if they weren't used to meet major, minor, or liberal studies requirements.)

Click here for more information about <u>Teacher</u>

<u>Preparation in Secondary Education</u>. You should also receive advisement from the College of Education for this part of your academic plan.

Please note that these 31 units include ECI 495C, which meets NAU's senior capstone requirement. Also note that for the B.S.Ed. in mathematics, you substitute MAT 302 for ECI 308.

GENERAL ELECTIVES

Additional coursework is required, if, after you have met the previously described requirements, you have not yet completed a total of 120 units of credit.

You may take these remaining courses from any academic areas, using these courses to pursue your specific interests and goals. We encourage you to consult with your advisor to select the courses that will be most advantageous to you. (Please note that you may also use prerequisites or transfer credits as electives if they weren't used to meet major, minor, or liberal studies requirements.)

8.	*A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAiLS focus, for which coursework requirements are established by the student in consultation with the advisor. If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.
**	For undergraduate plans, will a milestone** be used to: a. verify satisfactory completion of a non course requirement. b. indicate admission to a major. c. will not be used. *A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status. If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.
1	 Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage - <u>http://www4.nau.edu/assessment/main/degree/degree.htm</u>).

- Develop the skills necessary to communicate clearly and in professional fashion
 - Develop the skills necessary to communicate clearly and in professional fashion (both verbally and in written form) to specialists and non-specialists using proper terminology and structure;
- develop a solid, balanced, contemporary foundation in mathematics, statistics, mathematics education or actuarial science, including confidence in the use of mathematics and statistics and an awareness of concepts and advances of recent and current interest;
- 3. Develop the ability to use mathematics, statistics, mathematics pedagogy, or actuarial science to solve a wide range of basic problems;
- 4. Develop the ability to reason using the methods of the discipline;

- 5. Develop the ability to integrate knowledge and to use multiple perspectives to model simple realistic situations (or design curricula and delivery systems) and to solve related problems;
- 6. Develop an active approach to learning including the abilities to read disciplinary material in order to learn on their own and to use technology to experiment with functions and procedures;
- 7. Develop a context for disciplinary content and applications, including typical settings for the appearance of different concepts and methods in other disciplines and an appreciation for the development of the concepts and methods; and
- 8. Develop the skills necessary for successful entry into careers in the mathematical sciences and mathematics education or to pursue advanced study in their area and related areas.
- 11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.

The only change is to replace STA 270:Applied Statistics with a new course STA 277, pending approval, that is a calculus-based course in applied statistics. The new course has a better mathematical foundation that STA 270 and will provide a more substantial statistical base for our secondary education majors.

(There is no real change to the number of hours; this merely correcst a previous typo.)

- 12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?
- 13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU? No

If so, attach supporting documentation from the affected departments/units and college dean.

14. Will present library holdings support this academic plan/subplan?
Yes

Cer	rtiti	cat	ions

gant M. Mc Shane	20 Nov 2006
Department Chair/ Unit Head (if appropriate)	Date
Marine A Willett Swell	12-07-2006
Chair of college curriculum committee	Date
V LI Humno ke	7 Dec 06
Dean of college	Date
For Committee use only For University Curriculum Committee	1 / 1 (U) Date
Action taken:approved as submittedap	proved as modified

Note: Submit original to associate provost's office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.

UNIVERSITY CURRICULUM COMMITTEE

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

		,	
1. College 3. Academic	Engineering and Natural Sciences B.S. Mathematics	2. Academic Unit _ [Mathematics and Statistics
Plan Name	· -	. Subplan (if applicable)?	
Tian Tiank	(Extended Major)		
5. Effective Dat	e <u>FALL</u> 2007		
6. Is this proposal for a: New Plan (Please refer to Plan and Subplan		🛮 Plan Change	☐ Plan Deletion
<u>definitions)</u>	☐ New Subplan	☐ Subplan Change	Subplan Deletion
column. Please of current on line a (http://www4.na	es, place the existing catalog text in this copy and paste the text directly from the cademic catalog: au.edu/aio/AcademicCatalog/academiccata	match those used in the left column. Please be aware that	
For New Plans, leave this column blank.		B.S. MATHEMATICS (EXTENDED MAJOR)	
	ATHEMATICS (EXTENDED MAJOR)	To earn this degree, you must complete at least 120 units of coursework, which we describe in the sections that	
coursework, which	ee, you must complete at least 120 units of the we describe in the sections that follow:	its of follow: ow: • at least 32 units of <u>liberal studies requirements</u>	
aware th STA pre requiren liberal si mathem	32 units of <u>liberal studies requirements</u> Be nat you may not use courses with an MAT or offix to satisfy these liberal studies ments. Please note that the usual 35 units for tudies are reduced to 32 units for atics majors, who are exempt from the 3-unitatics foundation requirement.	Be aware that you MAT or STA pres studies requireme 35 units for libera units for mathema	u may not use courses with an fix to satisfy these liberal nts. Please note that the usual 1 studies are reduced to 32 utics majors, who are exempt athematics foundation
• at least 6	60 units of major requirements	at least 60 units or	f major requirements
	courses, if needed, to reach an overall total st 120 units	• elective courses, i total of at least 12	f needed, to reach an overall 0 units
have prerequisite	ne courses required for your degree may s that you must also take. Check the courses subject. (You may be able to count these	Be aware that some courses required for your degree may have prerequisites that you must also take. Check the courses in the appropriate subject. (You may be able to	

count these prerequisites toward your liberal studies or prerequisites toward your liberal studies or general elective general elective credit.)

> Please note that you must have a grade of C or better in each mathematics or statistics course that you use to fulfill the requirements of this major.

Also be aware that you must complete NAU's diversity

7.

requirements of this major.

credit.)

Please note that you must have a grade of C or better in each

mathematics or statistics course that you use to fulfill the

Also be aware that you must complete NAU's diversity

requirements by taking two 3-unit courses, one in ethnic diversity and one in global awareness. These courses may be used to meet other requirements within your academic plan if you choose them carefully. Click here for a list of the available diversity courses

Also be aware that NAU requires that at least 30 units of the courses you take for your degree must be upperdivision courses (those numbered 300 and above).

Finally, please note that you may be able to use some courses to meet more than one requirement; however, you must still meet the total of at least 120 units to graduate. Contact your advisor for details.

MAJOR REQUIREMENTS

These requirements include common courses as well as courses that are specific to your particular emphasis, for a total of at least 57 units.

You must complete the following 36 units regardless of which emphasis you choose:

- core courses: MAT 136, 137, 226, 238, and 316 (18 units)
- MAT 320W, which meets NAU's junior writing requirement (3 units)
- CS 122 (3 units) (If you complete a minor or major in computer science, you may add 3 units to your general electives instead.)
- MAT 411C, 431C, and STA 473C (9 units) (Please note that these three courses together meet part of NAU's senior capstone requirement for this major; the remainder of the requirement is filled within your specific emphasis.)

In addition, you complete the following 24-27 units, which are specific to the emphasis—mathematics, applied mathematics, statistics, or actuarial science—you choose:

Actuarial Science Emphasis

You take these 27 units:

- ACC 255 and 256 (6 units)
- STA 270 and 471 (6 units)
- MAT 239, 362, 467, and 480 (12 units)
- STA 474C, which meets the remainder of NAU's senior capstone requirement (3 units)

Applied Mathematics Emphasis
You take these 24 units:

requirements by taking two 3-unit courses, one in ethnic diversity and one in global awareness. These courses may be used to meet other requirements within your academic plan if you choose them carefully. Click here for a <u>list of the available diversity courses</u>

Also be aware that NAU requires that at least 30 units of the courses you take for your degree must be upperdivision courses (those numbered 300 and above).

Finally, please note that you may be able to use some courses to meet more than one requirement; however, you must still meet the total of at least 120 units to graduate. Contact your advisor for details.

MAJOR REQUIREMENTS

These requirements include common courses as well as courses that are specific to your particular emphasis, for a total of at least 57 units.

You must complete the following 33 units regardless of which emphasis you choose:

- core courses: MAT 136, 137, 226, 238, and 316 (18 units)
- MAT 320W, which meets NAU's junior writing requirement (3 units)
- CS 122 (3 units) (If you complete a minor or major in computer science, you may add 3 units to your general electives instead.)
- MAT 411C, 431C, and STA 473C (9 units)
 (Please note that these three courses together
 meet part of NAU's senior capstone requirement
 for this major; the remainder of the requirement
 is filled within your specific emphasis.)

In addition, you complete the following 24-27 units, which are specific to the emphasis—mathematics, applied mathematics, statistics, or actuarial science—you choose:

Actuarial Science Emphasis
You take these 27 units!

- ACC 255 and 256 (6 units)
- · STA 270 or STA 275 (3 waits)
- STA 471 and 477 (6 units)
- MAT 239, 362, 467, and 480 (12 units)
- STA 474C, which meets the remainder of NAU's senior capstone requirement (3 units)

Applied Mathematics Emphasis

- MAT 239 and 362 (6 units)
- three of MAT 335, 368, 461 or 467 (9 units)
- one of MAT 412C or 441C or STA 474C, each of which meets the remainder of NAU's senior capstone requirement (3 units)
- MAT 480 or MAT 485 (3 units)
- 3 units of additional courses from MAT or STA courses numbered 300 or above (except MAT 301, 302, 401, and 402)

Mathematics Emphasis

You take these 24 units:

- one of MAT 239, 318, 365, and 442C (3 units)
- two of MAT 412C or 441C or STA 474C, each of which meets the remainder of NAU's senior capstone requirement (6 units)
- MAT 485 (3 units)
- 12 units of additional courses from MAT 239 and MAT or STA courses numbered 300 or above (except MAT 301, 302, 401, and 402)

Statistics Emphasis

You take these 24 units:

- STA 270, 371, 471, and 472 (12 units)
- STA 474C, which meets the remainder of NAU's senior capstone requirement (3 units)
- STA 485 or MAT 485 or MAT 480 (3 units)
- 6 units of additional courses from MAT 239 and MAT or STA courses numbered 300 or above (except MAT 301, 302, 401, and 402)

GENERAL ELECTIVES

Additional coursework is required, if, after you have met the previously described requirements, you have not yet completed a total of 120 units of credit.

You may take these remaining courses from any academic areas, using these courses to pursue your specific interests and goals. We encourage you to consult with your advisor to select the courses that will be most advantageous to you. (Please note that you may also use prerequisites or transfer credits as electives if they weren't used to meet major, minor, or liberal studies requirements.)

You take these 24 units:

- MAT 239 and 362 (6 units)
- three of MAT 335, 368, 461 or 467 (9 units)
- one of MAT 412C or 441C or STA 474C, each of which meets the remainder of NAU's senior capstone requirement (3 units)
- MAT 480 or MAT 485 (3 units)
- 3 units of additional courses from MAT or STA courses numbered 300 or above (except MAT 301, 302, 401, and 402)

Mathematics Emphasis

You take these 24 units:

- one of MAT 239, 318, 365, and 442C (3 units)
- two of MAT 412C or 441C or STA 474C, each of which meets the remainder of NAU's senior capstone requirement (6 units)
- MAT 485 (3 units)
- 12 units of additional courses from MAT 239 and MAT or STA courses numbered 300 or above (except MAT 301, 302, 401, and 402)

Statistics Emphasis

You take these 24 units:

- STA 270 or **275**, 371, 471, 472 and 477 (15 units)
- STA 474C, which meets the remainder of NAU's senior capstone requirement (3 units)
- STA 485 or MAT 485 or MAT 480 (3 units)
- 3 units of additional courses from MAT 239 and MAT or STA courses numbered 300 or above (except MAT 301, 302, 401, and 402)

GENERAL ELECTIVES

Additional coursework is required, if, after you have met the previously described requirements, you have not yet completed a total of 120 units of credit.

You may take these remaining courses from any academic areas, using these courses to pursue your specific interests and goals. We encourage you to consult with your advisor to select the courses that will be most advantageous to you. (Please note that you may also use prerequisites or transfer credits as electives if they weren't used to meet major, minor, or liberal studies requirements.)

8. For undergraduate plans, will this requirement be a student individualized plan*? on yes *A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAiLS focus, for which coursework requirements are established by the student in consultation with the advisor. If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.
 9. For undergraduate plans, will a milestone** be used to: a. verify satisfactory completion of a non course requirement. b. indicate admission to a major. c. will not be used. **A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status. If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.
10. Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage - http://www4.nau.edu/assessment/main/degree/degree.htm).
This plan addresses three general student learning outcomes: breadth and depth of mathematical knowledge, ability to communicate mathematics clearly, and facility with mathematical reasoning. Broad mathematical knowledge implies a basic understanding of the theory and applications of calculus, set theory, algebraic structures, and probability. Students should be able to communicate effectively, and be comfortable collaborating with others on mathematical problems. Mathematical reasoning involves the ability to read and understand formal mathematics, construct rigorous proofs, and solve mathematical problems, as well as an understanding of the context and applications of mathematics, and facility with the use of technology in a mathematical context.
11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.
One change is to replace STA 270: Applied Statistics with a new course STA 275, which is pending approval; this is a calculus-based course in applied statistics. The new course has a better mathematical foundation that STA 270 and will provide a more substantial statistical base for majors in the actuarial science and statistics emphases in the extended mathematics major.
Another new course, STA 477, pending approval will be required for the same two subplans in the extended major. Together with STA 471 the new course fulfills the Society of Actuaries' Validation by Educational Experience (VEE) requirement for Applied Statistical Methods. The course will also be invaluable to statistics majors as it allows the analysis of a different type of data set to other courses.
(There is no real change to the number of hours; this merely corrects a previous typo.)
12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?
 Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU? No If so, attach supporting documentation from the affected departments/units and college dean.

14. Will present library holdings support this academic plan/subplan?

Department Charl Unit Head (if appropriate)	20 nov 2006
Department Chart Unit Head (if appropriate)	Date
alaman Allehand	12-07-2006
Chair of college curriculum committee	Date
1 Stellenneke	7 Dec 06
Dean of college	Date
For committee use only	1/10/07
For University Curriculum Committee	Date
Action taken: V approved as submitted app	proved as modified

University Curriculum Committee

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

	1. College	Engineering and Natural Sciences	2. Academic Unit M	athematics and Statistics
	3. Academic Plan Name	Minor in Mathematics Secondary Education	4. Subplan (if applicable)?	
	5. Effective Da	te FALL 2007		
	6. Is this propos (Please refer to Plan		⊠ Plan Change	☐ Plan Deletion
	<u>definitions</u>)	New Subplan	☐ Subplan Change	Subplan Deletion
7.	this column. Ple from the current (http://www4.nau.edu	ges, place the existing catalog text in ease copy and paste the text directly at on line academic catalog: \[\frac{1}{2} \text{dir} \frac{1}{2} \text{catalog} \frac{1}{2} cata	Show the proposed changes in this BOLD the changes, to differentiate changing. (Describe the changed requirements match those used in the left column, if the units are not totaled correctly, adjust them accordingly.)	e from what is not under headings that Please be aware that
	For New Plans,	leave this column blank.		
:	MINOR M	ATHEMATICS SECONDARY EDUCATION	MINOR MATHEMATICS EDUCATION	
	To complete to following 20	this minor, you take the units:	To complete this minor, you to 20 units:	ke the following
	• MAT	136, 137, and 320W (11 units)	• MAT 136, 137, and 32	0W (11 units)
		of MAT 226, 301, 365, 401, and lus STA 270 (9 units)	• three of MAT 226, 301 402 plus STA 270 or S	
	or better in ea	nat you must have a grade of C ach mathematics or statistics ou use to fulfill the requirements	Please note that you must have better in each mathematics or sthat you use to fulfill the requiminor.	statistics course
	*A Student Indivi	luate plans, will this requirement be a stidualized Plan is an academic requirement that vairements are established by the student in consultandemic unit listed at the top of this form	ries by student, such as the 15-unit BAiLS focu- tion with the advisor.	

information about each student's individual requirements for the degree audit system.

 9. For undergraduate plans, will a milestone** be used to: a. verify satisfactory completion of a non course requirements. b. indicate admission to a major. c. will not be used. **A Milestone is used to record noncourse requirements, such as the HRM 800. 	D-hour work experience requirement or admission to Business Major status.
If yes, the academic unit listed at the top of this form hereby t milestone and keeping individual student records up to date.	akes responsibility for maintaining the
10. Please list the Learning Outcomes of the Plan/Subplan (see http://www4.nau.edu/assessment/main/degree/degree.htm)	e degree major assessment webpage -
N/A (Minor)	
11. Justification for proposal. Please indicate how past assess	ments of student learning prompted proposed changes.
Proposals for the new course STA 275 is pending. STA base and, if approved, credit will not be allowed for bocourse to count for the minor.	275 is similar to STA 270 but with a more theoretical th STA 270 and STA 275. The change here allows either
12. If this academic plan/subplan will require additional facult be satisfied?	y, space, or equipment, how will these requirements
13. Will this academic plan/subplan affect other majors, libera enrollment at NAU? No If so, attach supporting documentation from the affected d	
14. Will present library holdings support this academic plan/st Yes	abplan?
Certifications	,
Janet M. Mc Shane	20 Nov 2006
Department Chair/ Unit Head (if appropriate) Chair of college curriculum committee	20 Nov 2006 Date Date
Dean of college	7-Dec 06
For committee use only	1110107
For University Curriculum Committee	Date
Action taken:approved as submitted	approved as modified
Note: Submit original to associate provost's office. That office will pulliformation Office after approval.	rovide copies to the college dean, department chair, and Academic

Revised 08/06

University Curriculum Committee

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

	Engineering and Natural Sciences	2. Academic Unit Mathematics and Statistics
	3. Academic Plan Name Minor in Statistics	4. Subplan (if applicable)?
	5. Effective Date FALL 2007	
	6. Is this proposal for a: New Plan (Please refer to Plan and Subplan	
	definitions) New Subplan	☐ Subplan Change ☐ Subplan Deletion
7.	For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the current on line academic catalog: (http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm) Be sure you include all catalog text that pertains to this plan change	Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing. (Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)
	For New Plans, leave this column blank.	
	MINOR STATISTICS	MINOR STATISTICS
	To complete this minor, you take the following 18 units:	To complete this minor, you take the following 18 units:
	• STA 270, 371, 471, and 472 (12 units)	• STA 270 or 275 , 371, 471, and 472 (12 units)
	• two of STA 473C, 474C, 570, 571, 572, 574, and 575 plus MAT 368 and 467 (6 units)	• two of STA 473C, 474C, 477, 570, 571, 572, 574, and 575 plus MAT 368 and 467 (6 units)
	Please note that you must have a grade of C or better in each mathematics or statistics course that you use to fulfill the requirements of this minor.	Please note that you must have a grade of C or better in each mathematics or statistics course that you use to fulfill the requirements of this minor.

8. For undergraduate plans, will this requirement be a student individualized plan*?

no
yes

*A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAiLS focus, for which coursework requirements are established by the student in consultation with the advisor.

If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.
 9. For undergraduate plans, will a milestone** be used to: a. verify satisfactory completion of a non course requirement. b. indicate admission to a major. c. will not be used.
**A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.
 Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage - http://www4.nau.edu/assessment/main/degree/degree.htm).
N/A (Minor)
11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.
Proposals for the new courses STA 275 and STA 477 are pending. STA 275 is similar to STA 270 but with a more theoretical base and, if approved, credit will not be allowed for both STA 270 and STA 275. The change here allows either course to count for the minor and adds the other new course STA 477 to the list of optional courses.
12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?
 13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU? No If so, attach supporting documentation from the affected departments/units and college dean.
14. Will present library holdings support this academic plan/subplan? Yes
Certifications
Department Chair/ Unit Head (if appropriate) Date
Chair of college curriculum committee Date
Dean of college Date
For committee use only April 11407
For University Curriculum Committee Date
Action taken:approved as submittedapproved as modified
Note: Submit original to associate provost's office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.

UNIVERSITY CURRICULUM COMMITTEE

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

Engineering and Natural 1. College Sciences	2. Academic Unit Mathematics and Statistics
3. Academic Plan Name Minor in Mathematics	4. Subplan (if applicable)?
5. Effective Date FALL 2007	
6. Is this proposal for a: New Plan (Please refer to Plan and Subplan	
definitions)	☐ Subplan Change ☐ Subplan Deletion
For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the current on line academic catalog: (http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm) Be sure you include all catalog text that pertains to this plan change	Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing. (Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)
For New Plans, leave this column blank.	
MINOR MATHEMATICS To complete this minor, you take the following 21-23 units: • MAT 136, 137, and 316 (11 units) • one of MAT 226, 320W, or 365 (3 units) • 7-9 additional units from MAT or STA courses numbered 200 level or above (except MAT 301, 302, 401, and 402) Please note that you must have a grade of C or better in each mathematics or statistics course that you use to fulfill the requirements of this minor. Also note that at least 6 of the units in this minor must be at the upper-division level.	MINOR MATHEMATICS To complete this minor, you take the following 1224 units: • MAT 136, 137, and 316 (11 units) • one of MAT 226, 320W, 335 or 365 (3 units) 8-10 • 7-9 additional units from MAT or STA courses numbered 200 level or above (except MAT 301, 302, 401, 402. Please note that you must have a grade of C or better in each mathematics or statistics course that you use to fulfill the requirements of this minor. Also note that at least 6 of the units in this minor must be at the upper-division level.
8. For undergraduate plans, will this requirement be a stu- *A Student Individualized Plan is an academic requirement that var coursework requirements are established by the student in consultat If yes, the academic unit listed at the top of this form information about each student's individual requirement.	ies by student, such as the 15-unit BAiLS focus, for which ion with the advisor. nereby takes responsibility for providing complete

 9. For undergraduate plans, will a milestone** be used to: a. verify satisfactory completion of a non course requirement. b. indicate admission to a major. c. will not be used.
**A <i>Milestone</i> is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status. If yes , the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.
 Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage - http://www4.nau.edu/assessment/main/degree/degree.htm).
N/A (Minor)
11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.
The change in hours follows a change from 3 hours to 4 hours for MAT 238 and keeps the number of <i>courses</i> in the minor as originally intended. MAT 335: Complex Variables should be an attractive choice for students majoring in physics and some engineering programs; its inclusion in the "one of MAT 226, 320W, or 365" category is justified as by its theoretical base. A proposal for STA 275 is pending; if approved, credit will not be allowed for both STA 270 and STA 275. The statement here in the minor is simply to clarify this
12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?—
 13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU? No If so, attach supporting documentation from the affected departments/units and college dean.
14. Will present library holdings support this academic plan/subplan? Yes
Certifications
Department Chair/ Unit Head (if appropriate) Chair of college curriculum committee Date Date
Dean of college 7 Dec 06
For committee use only
For University Curriculum Committee Date
Action taken:approved as submittedapproved as modified

Note: Submit original to associate provost's office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.

UNIVERSITY CURRICULUM COMMITTEE

2006-07

MEETING SIGN IN SHEET

DATE: January 16, 2007

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UNIVERSITY CURRICULUM COMMITTEE January 16, 2007

3:00 p.m. – University Union, Havasupai A/B

<u>Agenda</u>

OLD BUSINESS		
I. MINUTES OF THE November 28, 2006 MEETING /	approved	
	10	
NEW BUSINESS		
I. CONSENT ITEMS -OPPING		
A. COLLEGE OF SOCIAL AND BEHAVIORAL SCIE		
1. EMF 251 – Electronic Media Staff Workshop 1	Course Change – grading option, requisites, description	
2. EMF 252 – Electronic Media Mgmt Workshop 2	Course Change- grading option, requisites	
3. JLS 208 – Fieldwork Experience	Course Change – credits	
4. JLS 230 – Humor Writing	Course Change – offering status	
5. POS 159 – Nature and Politics	Course Deletion	
6. POS 428 – Topics in Public Administration	Course Change – prerequisite	
7. VC 329 – Typographics	Course Change – prerequisite	
8. VC 333 – Graphic Design	Course Change - prerequisite	
B. CONSORTIUM OF PROFESSIONAL SCHOOLS		
1. HS 305W, 307, 333, 490	Course Change – prerequisites	
C. Diversity -	FOR 270 C. VIC Feb.; Division F. Vice Spring 0/	
C. Diversity -	FOR 270 for US Ethnic Diversity- Fall '06 Summer of	
D. COLLEGE OF ENGINEERING AND NATURAL SO	CHENCES	
1. EGR 286 – Engineering Design: The Process	Course Change – description, requisites	
2. CENE 180 – Computer Aided Drafting	Course Change - description Course Change - description	
3. CENE 251 – Applied Mechanics Statics	Course Change - description, requisites	
4. CENE 270 – Plane Surveying	Course Change – title, description	
5. CENE 280 – Environ. Engineering Fundamentals	Course Change – title, description Course Change – corequisite	
6. CENE 330 – Air Quality Engineering	Course Change – description	
7. CENE 332 – Solid and Hazardous Waste Mgmt.	Course Change - description, prerequisite	
8. CENE 333 – Applied Hydraulics	Course Change – description, prerequisite	
9. CENE 333L – Applied Hydraulics Lab	Course Change – description Course Change – description	
10. CENE 376 – Structural Analysis I	Course Change - description	
11. CENE 386W –Engineering Design: The Methods		
12. CENE 418 – Highway Engineering	Course Change – description	
13. CENE 420 – Traffic Study and Signal	Course Change – description, prerequisite	
14. CENE 430 – Air Pollution Controls Design	Course Change - prerequisite	
15. CENE 433 – Hydrology and Flood Control	Course Change - prerequisite Course Change - description, prerequisite	
16. CENE 434 –Water & Waste-Water Units Design	Course Change – description	
17. CENE 436 – Structural Steel Design	Course Change – description	
18. CENE 437 – Wood Building Design	Course Change – description	
19. CENE 438 – Reinforced Concrete Design	Course Change – description	
20. CENE 476 – Egr Design Porc Lab	Course Change – description Course Change – title, description	
21. CENE 486C – Engineering Design	Course Change – tric, description Course Change – prerequisite	
22. STA 473C – Intro to Mathematical Statistics I	Course Change - prerequisite	

TY A CONYONI YOUNG		
II. ACTION ITEMS		
A. COLLEGE OF SOCIAL AND BEHAVIORAL SCIE	NCES A Charled	
1. Minor in Native American Studies	Plan Change	
2. BS Applied Indigenous Studies	Plan Change	
3. BA Applied Indigenous Studies	Plan Change	
4. BSJED	Plan Deletion Work Converse	
5. PRM 221 – Intro to Orienteering	New Course	
6. PRM 222-Search and Rescue Technician II& III	New Course MR.	
7. PRM 223 – Intro to Technical Rescue	New Course New Course	
8. PRM 224 – Intro to Tracking	New Course A & C 7	
9. PRM 225 – Avalanche Safety Level I	New Course & Sel	
10. PRM 432 – Intro to Multi-day River Expedition	New Course & CCU offers	
Leadership		
D COLLECE OF ENCINEEDING AND MARKID AT CO	TIENCIEC	
B. COLLEGE OF ENGINEERING AND NATURAL SO		
1. BS Biology 2. BS Exercise Science	Plan Change - Marked = 160 1 abstan	
ν.	Plan Change - no obstain.	
3. CENE 150L – Intro to Environ. Engin. Lab	New Course	
4. CENE 383L – Geotechnical Engineering 1 Lab 5. CENE 383 – Soil Mechanics and Foundations	New Course	
· · · · · · · · · · · · · · · · · · ·	Course Change – title, description, corequisite	
6. CENE 457 – Masonry Design	New Course	
7. STA 275 – Statistical Analysis	New Course	
8. STA 477 – Time Series Analysis	New Course	
9. STA 270 – Applied Statistics	Course Change – description	
10. STA 371 – Intermediate Statistics	Course Change – prerequisite	
11. STA 471 – Regression Analysis	Course Change- prerequisite	
12. STA 472 – Nonparametric Statistics	Course Change- prerequisite / (4) V	
13. BSEd Mathematics Secondary	Plan Change	
14. BS Mathematics Extended	Plan Change	
15. Minor in Mathematics, Secondary Education	Plan Change	
16. Minor in Statistics	Plan Change	
17. Minor in Mathematics	Plan Change	
III. DISCUSSION		
A. Curriculum Review of University Course	isnot	
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