

Submit originals and one copy and electronic copy to **Governance/Faculty Senate Office**  
 See <http://www.uaf.edu/uafgov/faculty/cd> for a complete description of the rules governing curriculum & course changes.

**CHANGE COURSE (MAJOR) and DROP COURSE PROPOSAL**

<b>SUBMITTED BY:</b>			
Department	Mathematics & Statistics	College/ School	CNSM

Prepared by	Leah Berman	Phone	x7123
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Email Contact	lwberman@alaska.edu	Faculty Contact	Leah Berman
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<b>1. COURSE IDENTIFICATION:</b>			
Dept	MATH	Course #	F402
		No. of Credits	3

**RECEIVED**

<b>COURSE TITLE</b>	Intermediate Real Analysis
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OCT 25 2011

Dean's Office  
 College of Natural Science & Mathematics

<b>2. ACTION DESIRED:</b>			
Change Course	<input type="checkbox"/>	If Change, indicate below what change.	Drop Course
			<input checked="" type="checkbox"/>

<b>NUMBER</b>	<input type="checkbox"/>	<b>TITLE</b>	<input type="checkbox"/>	<b>DESCRIPTION</b>	<input type="checkbox"/>
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<b>PREQUISITES</b>	<input type="checkbox"/>	<b>FREQUENCY OF OFFERING</b>	<input type="checkbox"/>
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<b>CREDITS (including credit distribution)</b>	<input type="checkbox"/>	<b>COURSE CLASSIFICATION</b>	<input type="checkbox"/>
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<b>CROSS-LISTED</b>	<input type="checkbox"/>	Dept.	<input type="checkbox"/>	(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)
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<b>STACKED (400/600)</b> Include syllabi.		Dept.		Course #	
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<b>OTHER (please specify)</b>	
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**3. COURSE FORMAT**  
NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the core review committee.

**COURSE FORMAT:** (check all that apply)

<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input checked="" type="checkbox"/>	6 weeks to full semester
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<b>OTHER FORMAT (specify all that apply)</b>	
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<b>Mode of delivery (specify lecture, field trips, labs, etc)</b>	lecture
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**4. COURSE CLASSIFICATIONS:** (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual. If justification is needed, attach on separate sheet.)

H = Humanities	<input type="checkbox"/>	S = Social Sciences	<input type="checkbox"/>
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Will this course be used to fulfill a requirement for the baccalaureate core?	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
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IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6 also submitted	<input type="checkbox"/>	W = Writing Intensive, Format 7 submitted	<input type="checkbox"/>	Natural Science, Format 8 submitted	<input type="checkbox"/>
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**5. COURSE REPEATABILITY:**

Is this course repeatable for credit?

YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
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<b>Justification:</b> Indicate why the course can be repeated (for example, the course follows a different theme each time).	
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How many times may the course be repeated for credit?

TIMES

If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course?

CREDITS

6. **CURRENT CATALOG DESCRIPTION AS IT APPEARS IN THE CATALOG: including dept., number, title and credits**

### **MATH F402 Intermediate Real Analysis**

3 Credits

Offered As Demand Warrants

Intermediate topics and applications in real analysis: metric spaces, sequences and series of functions, modes of convergence. Possible other topics include: fourier series, the stone-weierstrass theorem, the arzela-ascoli theorem. Prerequisites: MATH F401. (3+0)

7. **COMPLETE CATALOG DESCRIPTION AS IT WILL APPEAR WITH THESE CHANGES: (Underline new wording ~~strike through old wording~~ and use complete catalog format including dept., number, title, credits and cross-listed and stacked.) PLEASE SUBMIT NEW COURSE SYLLABUS. For stacked courses the syllabus must clearly indicate differences in required work and evaluation for students at different levels.**

8. **IS THIS COURSE CURRENTLY CROSS-LISTED?**

YES/NO

If Yes, DEPT

NUMBER

(Requires written notification of each department and dean involved. Attach a copy of written notification.)

9. **GRADING SYSTEM: Specify only one**

LETTER:

PASS/FAIL:

**10. ESTIMATED IMPACT**

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

None.

**11. LIBRARY COLLECTIONS**

Have you contacted the library collection development officer ([kljensen@alaska.edu](mailto:kljensen@alaska.edu), 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

No

Yes

**12. IMPACTS ON PROGRAMS/DEPTS:**

What programs/departments will be affected by this proposed action?  
Include information on the Programs/Departments contacted (e.g., email, memo)

Mathematics. This course has not been offered in several years.

**13. POSITIVE AND NEGATIVE IMPACTS**

Please specify **positive and negative** impacts on other courses, programs and departments resulting from the proposed action.

Positive: the course will no longer be cluttering up the catalog.

Negative: it will be more complicated for students to study intermediate real analysis.

**JUSTIFICATION FOR ACTION REQUESTED**

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. If you ask for a change in # of credits, explain why; are you increasing the amount of material covered in the class? If you drop a prerequisite, is it because the material is covered elsewhere? If course is changing to stacked (400/600), explain higher level of effort and performance required on part of students earning graduate credit. Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the course is not compromised as a result.

The course has not been offered for a number of years, and we thought we'd successfully removed it from the catalog previously. Dropping the course will have no impact.

**APPROVALS:**

	Date	10/18/2011
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Signature, Chair, Program/Department of:	Mathematics & Statistics (AMS)
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	Date	10/24/11
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Signature, Chair, College/School Curriculum Council for:	CNSM
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	Date	Oct 25, 2011
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Signature, Dean, College/School of:	CNSM
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	Date	
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Signature of Provost (if applicable)

Offerings above the level of approved programs must be approved in advance by the Provost.

**ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE.**

	Date	
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Signature, Chair, UAF Faculty Senate Curriculum Review Committee

*ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)*

	Date	
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Signature, Chair, Program/Department of:

	Date	
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Signature, Chair, College/School Curriculum Council for:

	Date	
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Signature, Dean, College/School of:

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