

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).
 See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/> for a complete set of rules governing curriculum & course changes.

RECEIVED

TRIAL COURSE OR NEW COURSE PROPOSAL
 (Attach copy of syllabus)

SEP 26 2016

SUBMITTED BY:		Dean's Office	
Department	DMS	College/School	CNSM College of Natural Science & Mathematics

Prepared by	Leah Berman	Phone	907-474-7123
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Email Contact	lwberman@alaska.edu	Faculty Contact	lwberman@alaska.edu
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1. ACTION DESIRED (CHECK ONE):	Trial Course	<input type="checkbox"/>	New Course	<input checked="" type="checkbox"/>
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2. COURSE IDENTIFICATION:	Dept	MATH	Course #	230R	No. of Credits	1
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Justify upper/lower division status & number of credits:	
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3. PROPOSED COURSE TITLE:	Prep for Calculus Essentials with Applications
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4. To be CROSS LISTED? YES/NO	No	If yes, Dept.		Course #	
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NOTE: Cross-listing requires approval of both departments and deans involved. Add lines at end of form for additional required signatures.

5. To be STACKED?* YES/NO	No	If yes, Dept.		Course #	
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How will the two course levels differ from each other? How will each be taught at the appropriate level?:	
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* Use only one Format 1 form for the stacked course (not one for each level of the course!) and attach syllabi. Stacked course applications are reviewed by the (Undergraduate) Curricular Review Committee and by the Graduate Academic and Advising Committee. Creating two different syllabi (undergraduate and graduate versions) will help emphasize the different qualities of what are supposed to be two different courses. The committees will determine: 1) whether the two versions are sufficiently different (i.e. is there undergraduate and graduate level content being offered); 2) are undergraduates being overtaxed?; 3) are graduate students being undertaxed? In this context, the committees are looking out for the interests of the students taking the course. Typically, if either committee has qualms, they both do. More info online – see URL at top of this page.

6. FREQUENCY OF OFFERING:	Fall/Spring/Summer (offered in Wintermester, Maymester and Summer)
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Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or
As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING (Effective
AY2015-16 if approved by 3/31/2015; otherwise
AY2016-17)

Fall 2017

8. 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 checked="" type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>	5	<input type="checkbox"/>	6 weeks to full semester
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OTHER FORMAT (specify)

Mode of delivery (specify
lecture, field trips, labs, etc)

Lectures with group work and discussion

9. CONTACT HOURS PER WEEK:

4.5	LECTURE hours/weeks	6	LAB hours /week	0	PRACTICUM hours /week
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Note: # of credits are based on contact hours. 800 minutes of lecture=1 credit. 2400 minutes of lab in a science course=1 credit. 1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-9000 minutes of internship=1 credit. This must match with the syllabus. See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-guidelines-for-computing/> for more information on number of credits.

OTHER HOURS (specify type)

4.5 lecture hours/wk = 9 hours = 540 minutes = 0.7 credits
6 lab (science) hours/wk = 12 hours = 240 minutes = 0.3 credits

10. **COMPLETE CATALOG DESCRIPTION** including dept., number, title, credits, credit distribution, cross-listings and/or stacking (50 words or less if possible):

Example of a **complete** description:

FISH F487 W, O Fisheries Management

3 Credits Offered Spring

Theory and practice of fisheries management, with an emphasis on strategies utilized for the management of freshwater and marine fisheries. Prerequisites: COMM F131X or COMM F141X; ENGL F111X; ENGL F211X or ENGL F213X; ENGL F414; FISH F425; or permission of instructor. Cross-listed with NRM F487. (3+0)

MATH F230R Prep for Essential Calculus with Applications

1 Credit

An intensive, individualized review of prerequisite topics needed in Essential Calculus with Applications along with small group practice of related topics. Emphasis will be placed on problem solving and mathematical communication. Also included will be instruction on how to be successful in calculus. Note: Credit may be earned for taking MATH F230R or MATH F230S, but not for both.

Prerequisites: Previous W or grade below C- in MATH F230X; or placement into MATH F230X; or departmental recommendation.

Lecture + Lab + Other: 0.7 + 1 + 0

11. **COURSE CLASSIFICATIONS:** Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.

H = Humanities

S = Social Sciences

Will this course be used to fulfill a requirement for the baccalaureate core? If YES, attach form.

YES:

NO:

X

IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6

W = Writing Intensive, Format 7

X = Baccalaureate Core

11.A Is course content related to northern, arctic or circumpolar studies? If yes, a will be added in the printed Catalog, and flagged in Banner.

"snowflake" symbol

YES

NO

X

12. **COURSE REPEATABILITY:**

Is this course repeatable for credit?

YES

NO

X

Justification: 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 for credit, what is the maximum number of credit hours that may be earned for this course?

CREDITS

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

13. GRADING SYSTEM: Specify only one. Note: Changing the grading system for a course later on constitutes a Major Course Change - Format 2 form.

LETTER:

PASS/FAIL:

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES

Previous W or grade below C- in MATH F230X; or placement into MATH F230X; or departmental recommendation.

These will be required before the student is allowed to enroll in the course.

15. SPECIAL RESTRICTIONS, CONDITIONS

16. PROPOSED COURSE FEES

\$

Has a memo been submitted through your dean to the Provost for fee approval?
Yes/No

17. PREVIOUS HISTORY

Has the course been offered as special topics or trial course previously?
Yes/No

Sort of

If yes, give semester, year, course #, etc.:

We've offered this type of prep course for Math 151, 156, 122, 251 and thought we were offering it for 230 as well.

18. ESTIMATED IMPACT

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

The course requires use of a computer lab for the two weeks that the course meeting. It will also require a course blackboard shell. All other resources will come out of the current DMS math bridge program.

19. LIBRARY COLLECTIONS

Have you contacted the library collection development officer (kjensen@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

20. 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)

This will primarily impact DMS but peripherally will impact any program that requires core math (in particular, biology and School of Management)

21. POSITIVE AND NEGATIVE IMPACTS

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

Positive:

- Students will gain knowledge and skills needed to succeed in mathematics;
- Students will be less likely to repeat this math class more than once
- students will be more prepared for quantitative work in their program

Negative:


- more complicated advising;
- harder for students to register for their core math course if they've failed it once.

JUSTIFICATION FOR ACTION REQUESTED

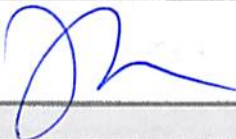
The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

We thought we were offering this Prep course along with the other Prep for ... courses (Math 122R, Math 151R, Math 156R, Math 251R) but apparently not.

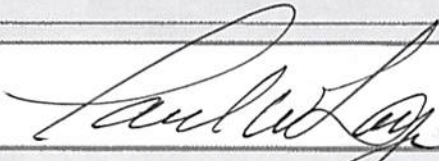
APPROVALS: Add additional signature lines as needed.

	Date	9/20/16
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Signature, Chair, Program/Department of: Math & Stat

	Date	9-26-16
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Signature, Chair, College/School Curriculum Council for: CNSM

	Date	9/27/16
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Signature, Dean, College/School of:

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

	Date	
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Signature of Provost (if above level of approved programs)

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

	Date	
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Signature, Chair Faculty Senate Review Committee: <input type="checkbox"/> Curriculum Review <input type="checkbox"/> GAAC <input type="checkbox"/> Core Review <input type="checkbox"/> SADAC
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ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

<input type="text"/>	Date	<input type="text"/>
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Signature, Chair, Program/Department of:	<input type="text"/>
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<input type="text"/>	Date	<input type="text"/>
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Signature, Chair, College/School Curriculum Council for:	<input type="text"/>
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<input type="text"/>	Date	<input type="text"/>
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Signature, Dean, College/School of:	<input type="text"/>
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ATTACH COMPLETE SYLLABUS (as part of this application). This list is online at:
<http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/uaf-syllabus-requirements/>

The Faculty Senate curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course (or changes to it) may be denied.

Syllabus CHECKLIST for all UAF courses

During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

1. Course information:

Title, number, credits, prerequisites, location, meeting time (make sure that contact hours are in line with credits).

2. Instructor (and if applicable, Teaching Assistant) information:

Name, office location, office hours, telephone, email address.

3. Course readings/materials:

Course textbook title, author, edition/publisher.
 Supplementary readings (indicate whether required or recommended) and

MATH F230R Section FQ1: Prep for Essential Calculus
Maymester 2016
MTWRF 10:00am-12:00pm Chapman 106

INSTRUCTORS:

	Latrice Bowman	Samantha Warren
email	lnbowman@alaska.edu	scwarren@alaska.edu
office	Chapman 301E	Eielson 302C
phone	(907)474-5427	(907)474-2452

CLASS MEETINGS: This class meets from 10am-12pm in Chapman 106 M-F from May 9 2016 to May 20, 2016.

MATERIALS: In addition to the ALEKS access (provided) students will also need a computer/laptop, internet access, a UAF email address, a bound notebook for writing math and pencil. There is no text needed for this course.

PREREQUISITES: Previous W or grade below C- in MATH F230; or departmental recommendation.

COURSE DESCRIPTION: An intensive, individualized review of prerequisite topics needed in calculus along with small group practice of related mathematical topics. Emphasis will be placed on problem solving and mathematical communication. Also included will be instruction on how to be successful in calculus.

COURSE GOALS: The principal goal of this course is to prepare students to be successful in MATH 230 Essential Calculus. This preparation has two distinct components: mathematical knowledge base and practical study skills. The mathematical component will focus on mastery of prerequisite material. The study skills portion covers a variety of techniques for understanding and retaining mathematical ideas.

STUDENT LEARNING OUTCOMES:

- Apply a variety of techniques to solve linear, polynomial, exponential, logarithmic.
- Simplify algebraic expressions.
- Graph functions and interpret those graphs.
- Understand the basic properties of functions.
- Move between numerical, graphical and algebraic representations of functions.
- Use mathematical modeling to solve applied problems in the areas of business, economics, life and social sciences.
- Understand the characteristics of students who are successful in college mathematics courses.
- Develop personalized techniques for absorbing and mastering new mathematical concepts and skills, and for managing the workload of a college math course.

EVALUATION:

This course is graded Pass/Fail. In order to earn a passing grade, a student must satisfy *all* of the requirements below:

- Attend all 24 of the assigned class hours with at most one absence and only if it is excused.
- Actively participate in the class. This includes contributing to class discussions, working on ALEKS, and reading and completing all study skills assignments.
- Complete a minimum of 3 hours per day on ALEKS from May 9 to May 19 (including Saturday and Sunday).
- Complete at least 90% of the entire ALEKS pie chart.
- Complete at least 90% of each section of your ALEKS pie chart.
- Complete all of the study skills assignments and turn them in on the day that they are due.
- Earn a score of at least 80% on your Final Assessment (May 19 or May 20). You will be allowed 2 attempts.

COURSE MECHANICS:

A portion of each class day will be spent discussing some study skill and a portion of each class will be spent working on ALEKS. At the end of each day you will be given a short homework assignment to complete the next day. In addition, you will need to work on you own on ALEKS every day. It is important to understand why we have you work on ALEKS in class. The reason is that students tend to get stuck on certain topics or types of problems. In-class time is for getting help and asking questions. **You should come to class prepared to ask questions.**

TENTATIVE COURSE SCHEDULE:

date	day	topic
05/09	Monday	introduction to course, initial assessment on ALEKS; hmwk: ALEKS Plan
05/10	Tuesday	time management
05/11	Wednesday	getting help and asking questions
05/12	Thursday	class attendance
05/13	Friday	completing assignments
05/16	Monday	syllabi and grade calculations
05/17	Tuesday	tests (and other in-class assessments): beginning, middle, end
05/18	Wednesday	portrait of a solid student
05/19	Thursday	commit to a plan for Spring semester
05/20	Friday	final assessment

SUPPORT SERVICES:

DMS Math and Stat Lab: If you need extra help, there is free tutoring available. The Math and Stat Lab is located in CHAP 305 and is staffed by Math Graduate students, upper-division Math students and Math faculty. This lab operates on a walk-in basis and is open this summer Monday - Friday 9am-7pm and Saturday 12pm-5pm.

SSS (Student Support Services) provides one-on-one tutoring to students who satisfy the requirements of the program. In addition to math tutoring SSS provides, advising, all core subject tutoring, laptop rentals and some other services.

The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. Your instructor(s) will work with the Office of Disabilities Services (208 WHIT, 474-5655) to provide reasonable accommodation to students with disabilities.