

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 description of the 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 #	230S	No. of Credits	1
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Justify upper/lower division status & number of credits:	
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3. PROPOSED COURSE TITLE:	Calculus Essentials with Applications Skills Workshop
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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:	each semester
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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 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)

9. CONTACT HOURS PER WEEK:

0.5

LECTURE
hours/weeks

1.5

LAB
hours /week

0

PRACTICUM
hours /week

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. 2400-8000 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)

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 F230S Essential Calculus with Applications Skills Workshop

1 Credit

Directed study of topics in MATH F230X; emphasis will be placed on problem solving and mathematical communication. Also included will be instruction on how to be successful in calculus and other mathematics-based courses. Note:

Credit may be earned for taking MATH F230R or MATH F230S, but not for both.

This course requires concurrent enrollment in MATH F230X.

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

Lecture + Lab + Other: 0.5 + 1.5 + 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

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).

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 skills workshop 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 (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

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 Skills Workshop course along with the other ... Skills Workshop courses (Math 122S, Math 151S, Math 156S, Math 251S) but apparently not.

APPROVALS: Add additional signature lines as needed.

Leah Beier

Date

9/20/16

Signature, Chair, Program/Department of:

Math & Stat

[Signature]

Date

9-26-16

Signature, Chair, College/School Curriculum Council for:

CNSM

[Signature]

Date

9/27/16

Signature, Dean, College/School of:

CNSM

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

Date

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: ___Curriculum Review ___GAAC
___Core Review ___SADAC

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

	Date	
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Signature, Chair, Program/Department of:

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	Date	
--	------	--

Signature, Chair, College/School Curriculum Council for:

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	Date	
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Signature, Dean, College/School of:

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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:

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

MATH F230S Spring 2016

Essential Calculus Skills Workshop Course Syllabus

Instructor: Latrice Bowman

Email: lnbowman@alaska.edu **Office:** Chapman 301E **Office Phone:** (907)474-5427

Office Hours: TBA.

If you have any questions about this course or concerns, please feel free to contact me.

Math Bridge Assistant: Samantha Warren **Email:** scwarren@alaska.edu

Her office is located in Eielson 302. If you have questions about attendance or study skills assignments you have turned in, please contact Kit.

Text: Calculus for Business, Economics, Life and Social Sciences, 13th edition by Barnett, Ziegler, and Byleen. (This is the text being used in your Math 230x course)

Materials: In addition to the course text, paper and pencil, students will also need to bring notes, questions, homework and graded work to class.

Course Description:

A group oriented and hands-on review of course specific topics. Emphasis will be placed on problem solving. Also included will be instruction on how to be successful in college-level mathematics courses.

Course Goals:

The main purpose of this course is to help students form good study habits and understand how to develop mathematical understanding. We will cover material needed to learn and understand Essential Calculus, (this course will include the content of MATH 230X and aid students in understanding this material). Students will also study mathematical notation, methods for solving equations, and problem-solving of real-world applications. Students will recognize that the structure of this course emphasizes mastery of all course material.

Student Learning Outcomes:

- Identify and find all solutions to equations and inequalities
- Graph functions and interpret graphs
- Understand the basic properties of functions
- Apply a variety of techniques to find solutions to equations
- Move between numerical, graphical and algebraic representations of functions
- Use mathematical concepts to solve applications
- Formulate methods for studying and reviewing mathematics

Evaluation/Grading:

This course is graded Pass/Fail. In order to receive a passing grade in this course, students must:

- Attend at least 90% of the meeting days (26 of 29)
- Complete and turn in 80% study skills assignments
- Must complete and turn in regular course grade checks

- Must actively participate in class discussions and activities

Students should understand that if they do not meet these criteria they may be withdrawn from the course. If a student is withdrawn from MATH 230S, they will also be withdrawn from Math 230X.

Instructional Methods:

This course is designed to help students succeed in their core MATH 230x course. In MATH 230S, students will spend the first 20 minutes of each Monday or Tuesday discussing study skills and student success strategies for mathematics. These assignments are due the following week at the beginning of class. The remainder of the sessions will include both discussion and problem solving (you will be graded on your participation in both). You will also be asked to submit grade checks regularly to ensure that you are keeping up with your math class. All work to be completed will be available on Blackboard and students will be able to view completion progress on Blackboard. Students should come to class with notes; graded and ungraded assignments; and questions.

Course Policies:

Students are required to attend class and participate daily. Students should arrive on time and be prepared to work. Students are allowed to have at most 3 absences. Students will need to be able to work in groups and are strongly encouraged to ask questions.

Additional Support:

The UAF Math and Stat Lab: This free service can provide help on any problems within this course. For assistance you will need to go to Chapman 305. This is a drop in tutoring lab. You may go there to do homework or get specific questions answered. The lab will be open Monday-Friday 10am-8pm and Saturdays 12pm-6pm.

One-on-one tutoring: This free service is available to students in Eielson 302. If you need a little more time with a tutor than the lab allows you can schedule 30 minute or hour long appointments with a tutor. To sign up for a one-on-one tutoring appointment go to <https://1-1tutoring.youcanbook.me/>

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

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

University and Department Policies: Your work in this course is governed by the UAF Honor code. The Department of Mathematics and Statistics has specific policies on incomplete grades, late withdrawals, and early final exams. A complete listing can be found at <http://www.dms.uaf.edu/dms/Policies.html>.