100-UNC Revised 3/20/17 **FORMAT 1**

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.

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

SUBMITTED BY:				
Department	**DMS**	**College/School**	**CNSM**	

Prepared by	**Leah Berman**	**Phone**	**x7123**	

Email Contact	**lwberman@alaska.edu**	**Faculty Contact**	**lwberman@alaska.edu**	

1. ACTION DESIRED (CHECK ONE):	Trial Course		New Course	X	

2. COURSE IDENTIFICATION:	Dept	MATH	Course #	**F251L**	No. of Credits	**0**	

Justify upper/lower division status & number of credits:	**This is a zero-credit recitation section; we are already having students meet for one hour a week in Calculus I recitation sections, but the two recitation times are tied to a specific lecture section. The point of adding a Math 251L would be to allow students from any of the three lecture sections to choose any of the 6 recitation sections, to allow students greater flexibility with their schedule. This proposal follows the CHEM 105 system.**	

3. *PROPOSED COURSE TITLE:*	**Calculus I Recitation**	

4. To be CROSS LISTED? *YES/NO*	**No**	If yes, Dept:		Course #		

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 #		

How will the two course levels differ from each other? How will each be taught at the appropriate level?:		

* 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**	
	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)		*1*		*2*		*3*		*4*		*5*	X	*6 weeks to full semester*			

OTHER FORMAT (specify)		

Mode of delivery (specify lecture, field trips, labs, etc)	Class meeting (worksheets, quizzes, answering questions, etc.) one hour per week	

***9. CONTACT HOURS PER WEEK*:**		LECTURE□ hours/weeks	**1**	LAB hours /week		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 F251X Calculus I (m)
4 Credits
A first course in single-variable calculus. Topics include limits; continuity and differentiation of functions; applications of the derivative to graphing, optimization, and rates of change; definite and indefinite integration; and the Fundamental Theorem of Calculus. Note: Credit may not be earned for both MATH F251X and MATH F230X.
Prerequisites: MATH F151X and MATH F152X; or MATH F156X; or placement. **Corequisite for face-to-face classes:** Math F251L.
Attributes: UAF GER Mathematics Req
Lecture + Lab + Other: 4 + 0 + 0

MATH F251L Calculus I Recitation
0 credits
Recitation section for face-to-face sections of Calculus I. Activities may include worksheets, quizzes, and problem sessions associated with corresponding lecture material from Math F251X.
Corequisite: Math F251X.
Lecture + Lab + Other: 0 + 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?

YES ☐

12. COURSE REPEATABILITY:

Is this course repeatable for credit? If yes, fill out boxes below.	**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 <u>variable</u> 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:** **

***Work done in recitation will contribute to the overall grade in face-to-face sections of Math F251X; this specific course shouldn't have a grade, as a 0-credit course, because work here—like in Chem 105L and CHEM 105X—counts towards the overall Math 251X grade.*

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES	**Must be co-enrolled with Math F251X** (for face-to-face sections of Math F251X)

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

15. SPECIAL RESTRICTIONS, CONDITIONS	**Must be co-enrolled with Math F251X** (for face-to-face sections of Math F251X)

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**	**No**
If yes, give semester, year, course #, etc.:	

18. ESTIMATED IMPACT

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.	None—we simply are moving the recitations scheduled currently, which are tied to a specific course, to having their own existence so that students can schedule the recitation independently from a specific lecture section.

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	**X**	Yes		**Not relevant**

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)*	

All students who take Math F251X face-to-face.

21. POSITIVE AND NEGATIVE IMPACTS

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

It will make scheduling Calculus I recitation sections easier for students. It will make scheduling other lab sections easier for students. It will make it easier for students to figure out when the lecture sections for Calculus I are. It does not change the number of contact hours or the course content for Calculus I; students are already required to attend a recitation hour once a week.

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.

In calculus I, we currently have students come to lecture 4 hours a week and attend a recitation section with a TA one hour a week. The current model is that there are several sections (e.g., F01 and F02) which have the same lecture time in the same room, but different recitation sections. We are moving towards a model for Calculus I where all the sections are tightly coordinated, and in this model, all the recitation sections will be doing the same thing on the same day; thus, it makes sense to allow students enrolled in a lecture section to attend any recitation section that fits into their schedule, rather than to have to take a specific recitation section tied to their lecture section. In particular, this will allow students more flexibility when choosing lab sections for other natural science and engineering courses.

*Note: we talked to the registrar's office, and it is possible to have Math F251L listed in Banner as a required co-requisite only for the face-to-face sections offered on the Fairbanks campus; thus, adding this course will not affect distance sections or summer sections. (That is, they can put the Math F251L co-requisite associated with only certain CRNs.)

APPROVALS: Add additional signature lines as needed.

	Date		

Signature, Chair,

JUSTIFICATION FOR ACTION REQUESTED

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APPROVALS: Add additional signature lines as needed.

[signature]	Date	2/1/17	

Signature, Chair, Program/Department of:	Mathematics & Statistics

DocuSigned by: Patricia Doak 030F576CE5A7486...	Date	February 8, 2017	

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

DocuSigned by: [signature] E007E03EC77B4B8...	Date	February 8, 2017	

Signature, Dean, College/School of:	CNSM

Signature, Chair, Program/Department of:		

	Date	

Signature, Chair, College/School Curriculum Council for:		

	Date	

Signature, Dean, College/School of:		

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:
θTitle, θ number, θcredits, θprerequisites, θ location, θ meeting time ☐(make sure that contact hours are in line with credits).

2. Instructor (and if applicable, Teaching Assistant) information:
θ Name, θ office location, θ office hours, θ telephone, θ email address.

3. Course readings/materials:
θ Course textbook title, θ author, θ edition/publisher.
θ Supplementary readings (indicate whether θ required or θ recommended) and
θ any supplies required.

4. Course description:
θ Content of the course and how it fits into the broader curriculum;
θ Expected proficiencies required to undertake the course, if applicable.
θ Inclusion of catalog description is *strongly* recommended, and
θ Description in syllabus must be consistent with catalog course description.

5. θ Course Goals (general), and (see #6)

6. θ Student Learning Outcomes (more specific)

7. Instructional methods:
θ Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

8. Course calendar:

θ A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say "lab". Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

9. Course policies:

θ Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

10. Evaluation:

θ Specify how students will be evaluated, ❍ what factors will be included, θ their relative value, and ❍ how they will be tabulated into grades (on a curve, absolute scores, etc.) θ Publicize UAF regulations with regard to the grades of "C" and below as applicable to this course. (Not required in the syllabus, but is a convenient way to publicize this.) Link to PDF summary of grading policy for "C":□http://www.uaf.edu/files/uafgov/Info-to-Publicize-C_Grading-Policy-UPDATED-May-2013.pdf

11. Support Services:

θ Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

12. Disabilities Services: Note that the phone# and location have been **updated.**
http://www.uaf.edu/disability/faculty/ The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials. □ θ State that you will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655)to provide reasonable accommodation to students with disabilities. □Note: Optional Title IX syllabus statement:
http://www.uaf.edu/oeo/civil-rights/aa-eo/

Math 251X – Calculus I
Math F251L – Calculus I Recitation

Instructor Information

Name:	Amazing Instructor
Office:	Chapman 3XX
Phone:	XXX-XXXX
E-mail:	`...@alaska.edu`
Office Hours:	MWF 8:00 - 9:00, and by appointment

Teaching Assistant Information

Recitation section:	MATH F251L F01, F02, F03	MATH F251L F04, F05, F06
Name:	Some Graduate Student	Another Graduate Student
Office:	Chapman 3XX	Chapman 3XX
E-mail:	`...@alaska.edu`	`...@alaska.edu`
Office Hours:	TBA	

Course Information

Credits	4 credits
Prerequisites	(MATH F151X and MATH F152X) or Math F156X, or ALEKS placement score ≥ 78
Corequisites	MATH F251L, one of the sections F01 – F06
Location (Lecture)	MWF 9:15 - 10:15 Gruening 206 Tues 8:30-9:30 Gruening 306

Location (Recitation)

Math 251L F01	Math 251L F02	Math 251L F03	Math 251L F04	Math 251L F05	Math 251L F06
8:00 - 9:00	9:45 - 10:45	11:30 - 12:30	2:00 - 3:00	3:30 - 4:30	4:40 - 5:40
GRUE xx	GRUE xx	GRUE xx	GRUE xx	GRUE xx	GRUE xx

Course Reading Materials

- *Calculus: Early Transcendentals*, 8th edition by James Stewart. (ISBN-13: 978-1285741550 ISBN-10: 1285741552.) You can purchase this book at the UAF bookstore or elsewhere online. If you choose to order the book online from another vendor keep in mind that you will have to purchase a WebAssign code separately.
- *Web Assign Access Code* You will be doing a portion of your homework online. To do this you must have a Web Assign access code. If you purchase your textbook from the UAF bookstore this code will come packaged with your text. If not, you can purchase one on `www.webassign.net`. More instructions on getting into Web Assign can be found below in the section describing homework. I am fairly certain that Web Assign also comes with an online e-book. If you do not have your textbook yet you should be able to see the book (for homework problems) once you get into Web Assign.

Recitations

You must register for a section of Math F251L in addition to registering for a section of Math F251X.

Registering for Math F251L is how we keep track of which student is in which recitation section.

Completing recitation activities will be counted for a grade. Worksheets will distributed at recitations each week and are due at the beginning of class the next day.

Solutions to the worksheets will be posted and students are expected to check their own work. Recitation activies will be graded on a completion only scale, each activity will be worth 10 points, and one point will be deducted per problem skipped.

Course Description

Calculus is the language of physics and engineering, in addition to chemistry, economics and biology. In this course we will cover the basics of single variable calculus. You will learn both the meaning of, and how to use limits, derivatives and integrals. The application of these mathematical ideas to other disciplines (such as physics and engineering) will be discussed.

From the UAF course catalog:

> Limits, including those with indeterminate form, continuity, tangents, derivatives of polynomial, exponential, logarithmic and trigonometric functions, including product, quotient and chain rules, and the mean value theorem. Applications of derivatives including graphing functions and rates of change. Anti derivatives, Newton's method, definite and indefinite integrals, methods for substitution in integrals and the fundamental theorem of calculus. Applications of integrals include areas, distances, and volumes. Note: No credit may be earned for more than one of MATH F251X, MATH F222X, MATH F232X, or MATH F230X.

Course Goals

In this class, students will be expected to:

- master problem-solving skills,
- learn to manipulate abstract symbols,
- learn and appreciate the rigorous use of deductive arguments in mathematics,
- learn a broad spectrum of mathematical applications including:
  - limits and continuity,
  - differentiation and integration,
  - maximization and minimization problems,
  - analysis of functions of one variable and their graphs,
  - applications of integrals and derivatives.
- have mastered the prerequisite material for the course.

Instructional Methods

This course will be primarily lecture based with daily work assigned on WebAssign. Recitation times will be used for group or individual practice and quizzes. In order to do well in this course you will need to attend all classes. Attendance will be taken daily. Excessive absences could lead to a faculty-initiated withdrawal as you have not *participated substantially in the course.*

Math Bridge Requirements

If you are a student re-taking this course because you received a D, F, or W in Math 251X in the spring or summer of 2015 you are required to take a 1-credit Math Bridge Course to stay enrolled.

If you are a student who is required to take Math Bridge you will stay enrolled if you pass the pre-semester prep portion of the course. Students who fail the pre-semester prep must sign up for a skill workshop to remain enrolled. Failure to do so will result in your withdrawal from the course.

The pre-semester prep or skill workshop is available to students who wish to enroll voluntarily. Any student who is struggling is encouraged to do so. Please contact Kit Angeli at `kdangeli@alaska.edu` or Latrice Bowman at `lnbowman@alaska.edu` if you have any questions about the Math Bridge requirement and whether it applies to you.

Evaluation

In this course you will be evaluated based on your performance in homework, quizzes, exams and a final exam. Student grades will be dependent upon: homework (10%), quizzes (10%), chapter exams (50%), and the (cumulative) final exam (30%). More details on each of the categories is described below.

The grading scale used will be the plus/minus letter grades (93-100%=A, 90-92%= A-, 87-89%=B+, 83-86%= B, 80-82%= B-, 77-79%=C+, 70-76%=C, 67-69%=D+, 63-66%= D, 60-62%= D-, and below 60%=F). I reserve the right to make the brackets of this scale wider. An incomplete will be given due to extreme circumstances beyond your control (you will need to provide verifiable proof). After the drop date, students who do not wish to continue with the course will be responsible for withdrawing themselves. Failure to withdraw by the withdraw date will result in a grade of F.

Faculty Initiated Withdrawal

If you do not participate substantially in the course you will be withdrawn from the course by the instructor. If any of the following three conditions are met on the last allowable day for faculty-initiated withdrawals (October 30th), you will be withdrawn from the course. It is your responsibility to make sure that none of these conditions apply to you on that day.

- Missed 1/3 of the contact hours, including recitations.
- Earned less than 50% average on homework assignments.
- Have an overall average of less than 50%.

Homework

Homework will be assigned daily and will fall into two categories, WebAssign problems and "written" problems. Your homework grade will be a combination of your scores on WebAssign and your scores on written assignments.

WebAssign Homework

I will assign approximately 10-15 practice problems which must be done by the next class. These practice problems will be assigned on WebAssign. You will have 3-5 chances to get a problem correct. The point of these problems is to get you practicing the math we are learning in class. Use the multiple chances to learn from your mistakes! **Late WebAssign homework will be accepted for 1/2 credit within one week of the**

original due date. This extension should be already programmed into Web Assign, if something appears to not be extending properly please let me know!

To enroll in WebAssign:

- Go to `www.webassign.net/login.html`
- Click "I have a class key" at the bottom of the screen.
- Enter the class key **uaf 0525 5461** and click "submit."
- Verify that you are in the correct class.
- Select to create a new WebAssign account or use an existing account. A review screen will display your username and institution code. Write this information down (or put it in your phone!) for future reference. Memorize your password.

WebAssign gives you free access for two week after the start of class. To continue using WebAssign after that either enter an access code or purchase access online.

Additionally, I will also be giving suggested problems from the text. These problems are not required, but if you find yourself struggling, the only way to get better is to practice more. The suggested problems will be mostly odd-numbered problems. The answers can be found in the back of the text and most have fully worked solutions on-line. Use the solutions to see how mathematicians arrive at their solutions. Seeing and writing down the solution is a really helpful study tool!

Written Homework

In addition to the practice problems I will assign approximately 5 "written" problems per section. Most of these problems will be even-numbered exercises from the text. These will be due *bi-weekly*. Homework assigned on Monday and Tuesday will be due the following Thursday (at your recitation) and homework assigned on Wednesday and Friday will be due the following Tuesday (in class). Homework handed in early (either Wednesday or Monday, respectively) will receive 5 bonus points.

This written homework is a time for you to practice writing clear solutions to problems. Imagine that you are writing a solution to a problem that a friend will read and be able to understand. You do not have to show every teeny detail, but show what you think would make the solution easy to follow for another student. This homework will be graded by your TA. Written homework must follow a few formatting guidelines, see the final page for specifics. If you have questions or do not undersand what is meant by a guideline, please ask. **Late written homework will be accepted until 5 pm (turn late homework into you TA's box (NOT MINE) in Chapman) on the due date and 5 points will be deducted from the total.** After this 5 pm deadline, late written homework will not be accepted. Solutions will be posted as soon as the homework is graded.

Tutoring

I cannot guarantee that we will have time to discuss homework in class. Any questions about assignments should be addressed **before** the due date.

There are many resources available on campus to help you be successful in this course. If you have questions you can meet with me or your TA during office hours. The main option is a free tutoring center on campus called the Mathlab. The Mathlab is located on the third floor of the Chapman Building on the main UAF campus. For more information about the Mathlab (hours, tutor availability) visit their web page: `http://www.uaf.edu/dms/mathlab/`. There is also one-on-one (or small group) tutoring available in room 302 in the Eielson Building. See `http://www.uaf.edu/dms/mathlab/` for a calendar listing tutor availability and to schedule an appointment. Online tutoring is also returning for the fall semester, see the same website for more information about online tutoring.

Quizzes

We will have **weekly** homework quizzes. These will usually be given during recitations, any exceptions to this rule are listed in the course calendar. The quizzes will cover the material taught in the classes held since the previous quiz. These quizzes give you a chance to practice doing typical problems in a testing situation.

Quizzes cannot be made up! Make sure you come to class and take your quizzes!

Exams

We will have four exams and a final in this course. Exams will be given over each unit, defined by the chapters in the book. (The one exception is the first exam which will cover Chapters 1 and 2.) Exams cannot be made up unless you provide a convincing reason and let me know at least two class days before the exam. It is the Departments of Mathematics and Statistics policy that final exams cannot be given early or late.

Final Exam

The final exam is cumulative and is worth 30% of your overall grade. The final is pass/fail. Students who fail the final (less than 60%) will have their grade in the course adjusted down to the nearest non-passing grade.

Course Calendar

Here is a tentative schedule of the topics we will cover during the coming weeks. If I make any changes to the dates of exams I will provide notice at least a week in advance.

Dates	Monday	Tuesday	Wednesday	Thursday	Friday
9/3-9/4				Syllabus	1.1 & 1.2
9/7-9/11	Labor Day	1.3 & 1.4	1.4 & 1.5	Quiz Ch. 1	2.1
9/14 - 9/18	2.2	2.3 & 2.4	2.5	Quiz	2.6
9/21 - 9/25	2.7	2.8	Quiz	Ch. 1 & 2 Review	**Exam # 1**
9/28 - 10/2	3.1	3.2	3.3	Quiz	3.4
10/5 - 10/9	3.4	3.5	3.6	Quiz	3.7
10/12 - 10/16	3.8	3.9	3.9	Quiz	3.10
10/19 - 10/23	Ch. 3 Review	Ch. 3 Review	**Exam # 2**	TBA	4.1
10/26 -10/30	4.2	4.3	4.3	Quiz	4.4
11/2 - 11/6	4.5	4.5	4.7	Quiz	4.7
11/9-11/13	4.8	4.9	Quiz	Ch. 4 Review	**Exam # 3**
11/16 - 11/20	5.1	5.2	5.2	Quiz	5.3
11/23 - 11/27	5.3	5.4	Quiz	Gobble	Gobble
11/30 - 12/4	5.5	5.5	Quiz	Ch. 5 Review	**Exam # 4**
12/7 - 12/11	Ch. 2 Review	Ch. 3 Review	Ch. 4 Review	TBA	Ch. 5 Review
12/14 - 12/18	Last Day				Final Exam 8 a.m. - 10 a.m.

Important Dates to Remember

Deadline for adding classes, late registration and fee payment	Friday, September 11th
Deadline for 100% refund of tuition and fees	Friday, September 18th
Deadline for student and faculty-initiated drops	Friday, September 18th
Deadline for student and faculty-initiated withdrawals	Friday, October 30th
Last day of instruction	Monday, December 14th
Final Exam	Friday, December 18th at 8:00 am.

Support Services: In addition to the Math Lab, Student Support Services offers free tutoring (in many subjects) to students that qualify for their program. ASUAF offers private tutoring for a small fee (based on student income). In addition to the above services, students are always welcome to e-mail or talk to me after class and make an appointment to meet with me and ask questions.

Disability Services: The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials. I will work with the Office of Disability Services (208 Whitaker, 474-5655) to provide reasonable accommodations to students with disabilities.

Written Homework Guidelines

Any infraction of these rules will result in a 1-point deduction (per rule broken) from your total score. On the first assignment we will not deduct points for infractions of these guidelines, but we will warn you that you must change your format on the next assignment.

1. In the upper right hand corner, start each assignment with your
   (a) Legal Name (First and Last)
   (b) Assignment Name (such as "Section 1-2")
2. Do the problems in the order assigned.
3. Write in pencil or black ink! No scribbling. If you make a mistake erase it or recopy the problem. (If you chose to do your homework in pen I would suggest using one of these new, fancy erasable pens!)
4. Write in at most two columns.
5. Show your work down the columns, one step per line.
6. Box or circle answers.
7. Skip at least **one** line between problems.
8. Write legibly. If the grader cannot read it, the problem is wrong.
9. Staple together multiple pages.
10. Remove any "fringes".

Related Minor Change

FORMAT 2A
Submit original with signatures to Registrar's Office
Send electronic copy to the Governance Office

CHANGE COURSE (MINOR)

MINOR COURSE CHANGES INCLUDE ONLY THE FOLLOWING:

1. Frequency of offering.
2. Minor editorial changes in title and/or course description.
3. Jointly approved proposals for cross-listing current courses. (Requires approval of both departments and deans involved. Add lines at end of form for additional signatures.)
   (Stacking of 400/600 level courses is NOT considered a minor change.)
4. Change in course number that does not involve a change in **lower/upper** division status.
5. Internal departmental changes in **NON-CORE** course prerequisites. Changes MUST NOT affect courses (or degree programs) offered by other departments.

If changes cannot be considered "Minor" (as defined above), use the FORMAT 2 - CHANGE COURSE (MAJOR) and DROP COURSE form.

Remember to submit a Program Change form (Format 5 or 5A) if appropriate.

Catalog deadlines apply. Send Minor Change requests directly to the Registrar's Office after Dean's approval. (Please send informational e-copy to the UAF Governance Office.)

SUBMITTED BY:

Department	DMS	College/School	CNSM

Prepared by	Leah Berman	Phone	x7123

Email Contact	lwberman@alaska.edu	Faculty Contact	Leah Berman

See http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/ for a complete description of the rules governing curriculum & course changes.

1. COURSE IDENTIFICATION:

Dept	MATH	Course #	F251X	No. of Credits	4

COURSE TITLE	Calculus I

2. ACTION DESIRED: Indicate what is changing with an "X" or checkmark:

NUMBER		TITLE		DESCRIPTION	

PREREQUISITES	X	*FREQUENCY OF OFFERING*	

CROSS-LISTED		Dept.		(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

3. CURRENT CATALOG DESCRIPTION AS IT APPEARS IN THE CATALOG: including dept., number, title and credits. (Use online Catalog to cut and paste.)

MATH F251X Calculus I (m)
4 Credits
A first course in single-variable calculus. Topics include limits; continuity and differentiation of functions; applications of the derivative to graphing, optimization, and rates of change; definite and indefinite integration; and the Fundamental Theorem of Calculus. Note: Credit may not be earned for both MATH F251X and MATH F230X.
Prerequisites: MATH F151X and MATH F152X; or MATH F156X; or placement.
Attributes: UAF GER Mathematics Req
Lecture + Lab + Other: 4 + 1 + 0

4. MARK-UP OF COMPLETE CATALOG DESCRIPTION ILLUSTRATING CHANGES: (Underline new wording ~~strike through old wording~~ and use complete catalog format including dept., number, title, credits and cross-listed and stacked.)

MATH F251X Calculus I (m)
4 Credits
A first course in single-variable calculus. Topics include limits; continuity and differentiation of functions; applications of the derivative to graphing, optimization, and rates of change; definite and indefinite integration; and the Fundamental Theorem of Calculus. Note: Credit may not be earned for both MATH F251X and MATH F230X.
Prerequisites: MATH F151X and MATH F152X; or MATH F156X; or placement.
Corequisite for face-to-face classes: Math F251L.
Attributes: UAF GER Mathematics Req
Lecture + Lab + Other: 4 + 0 + 0

5. IS THIS COURSE CURRENTLY CROSS-LISTED?

YES/NO	NO	If Yes, DEPT		NUMBER	

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

6. ESTIMATED IMPACT

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

None

7. 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)

Should only be good things, but lots of students take calculus.

JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize course change applications to make sure that the quality of UAF education is not lowered as a result of ensure that the quality of the course is not compromised as a result.

We are trying to arrange it so that students taking Calculus I can choose any recitation time to go with their lecture time, rather than having the recitation hour as

As per attached.

APPROVALS: Add signature blocks as necessary (e.g., cross listing approvals)

	Date	

Signature, Chair, Program/Department of:

	Date	

Signature, Chair, College/School Curriculum Council for:

	Date	

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.

In calculus I, we currently have students come to lecture 4 hours a week and attend a recitation section with a TA one hour a week. The current model is that there are several sections (e.g., F01 and F02) which have the same lecture time in the same room, but different recitation sections. We are moving towards a model for Calculus I where all the sections are tightly coordinated, and in this model, all the recitation sections will be doing the same thing on the same day; thus, it makes sense to allow students enrolled in a lecture section to attend any recitation section that fits into their schedule, rather than to have to take a specific recitation section tied to their lecture section. In particular, this will allow students more flexibility when choosing lab sections for other natural science and engineering courses.

*Note: we talked to the registrar's office, and it is possible to have Math F251L be a required co-requisite only for the face-to-face sections offered on the Fairbanks campus; thus, adding this course will not affect distance sections or summer sections. (That is, they can put the Math F251L co-requisite associated with only certain CRNs.)

APPROVALS: Add additional signature lines as needed.

[signature]	Date	2/1/17	
Signature, Chair, Program/Department of:	Mathematics & Statistics		
DocuSigned by: Patricia Doak 030F576CE5A7486...	Date	February 8, 2017	
Signature, Chair, College/School Curriculum Council for:	CNSM		
DocuSigned by: [signature] E807E66EC77B4B6...	Date	February 8, 2017	
Signature, Dean, College/School of:	CNSM		