Class Times  
Tuesday and Thursday 11:30 a.m.-12:45 p.m.

Classroom  
SSB 224

Instructor  
Dr. Mark Fitch

Blackboard  
All class materials can be found on Blackboard at  
http://blackboard.uaa.alaska.edu/. If Blackboard is not accessible the materials  
may also be found at http://www.math.uaa.alaska.edu/~afmaf/classes/.

Office Hours  
Monday-Friday 1:00-2:15 p.m. See  
http://www.math.uaa.alaska.edu/~afmaf/classes for additional available times.

Email  
mafitch@uaa.alaska.edu

Phone  
786-1656

Office  
SSB 154D

Textbook  
A Transition To Advanced Mathematics by Smith, Eggen, St. Andre 7th edition  
(required).

Web access  
You may find it useful to have a laptop or other device in class for accessing  
course materials.

Topics  
The course is an introduction to the concepts and methods of mathematical  
proofs. Topics from algebra, analysis, discrete mathematics, and set theory will  
be presented as well.

Goals  
By the end of the appropriate section you should  
• be able to read and understand definitions, statements of theorems, and  
simple proofs;  
• be able to write simple proofs;  
• be able to create simple proofs using set theoretical concepts and proper  
notation; and  
• be able to identify and criticize invalid arguments.

Daily Lesson  
Purpose  
The lesson is the presentation of new material. By completing the lesson  
you will learn new topics.

Assignment  
Complete the lesson found online on Blackboard or at  
Note you may work with other students and ask questions of the  
instructor when working on the lesson.

Due  
Lessons must be completed before the class in which they are due.

Feedback  
Questions on the lesson will be addressed during class.

Class Time  
Purpose  
During class you will ask questions about the lesson, work on the  
homework, and ask questions as needed while working on the  
homework. Class time will ensure that you have the opportunity to
Assignment
You will work with the group to which you are assigned to develop understanding of the topics.

**Daily Homework**

**Purpose**
Text book problems provide an opportunity to realize questions, ask them, and develop skills at procedures. Be aware that most text book problems emphasize mechanical skills rather than understanding. As such they are not representative of test questions.

**Assignment**
Complete the problems from the textbook found online on Blackboard or at http://www.math.uaa.alaska.edu/~afmaf/classes/math215/schedule.html. Next to each problem on which you have a question write the specific question. These will be answered in class as time permits or in writing when homework is returned.

**Due**
These problems will be collected at the beginning of each class.

**Feedback**
If incorrect, the first, major wrong step in a problem will be noted with a note about the correct step if possible. Grading symbols, explained online, will be used to identify error types.

**Grading**
Selected problems will be graded for accuracy and presentation. At the end of the semester an allowance will be made for missed homework.

**Exams**

**Purpose**
Exams provide you with an opportunity to demonstrate your mastery of mechanical skills and your understanding of the concepts. The latter are weighted more heavily in the grading.

**Assignment**
Exams will be given on the dates specified on Blackboard or at http://www.math.uaa.alaska.edu/~afmaf/classes/math215/schedule.html.

**Feedback**
If incorrect, the first, major wrong step in a problem will be noted with a note about the correct step if possible. Grading symbols, explained online, will be used to identify error types. Full solutions will be provided in a posted answer key.

**Grading**
Your work will be graded for accuracy and presentation.

**ePortfolio**

**Purpose**
An ePortfolio is intended to document that you possess the skills, are capable of the ways of thinking, and perhaps even possess the sense of humor of a mathematician.

**Assignment**
Build a portfolio by including documents as described in the ePortfolio instructions that illustrate your skill and most importantly by including commentary that draws the ePortfolio’s viewer’s attention to the traits and ways of thinking.

**Feedback**
Comments on the completeness, appropriateness of artifact documents, and detail of commentary will be provided based on the initial submissions.

**Grading**
Your work will be graded for completeness of the portfolio and quality of commentary.

**Grading**
Your grades will reflect your ability to perform the tasks outlined in the goals and to clearly explain how you accomplished the tasks. Because understanding is more important than producing results, steps in a solution are more important than the result. Specific criteria are provided in the above and with individual
assignments as required.

**Assessments**

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<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Exams</td>
<td>20% x 3</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
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The final exam will be on May 2\textsuperscript{nd} from 10:00 a.m. - 12:45 p.m.

If you have a certified learning disability, please inform the instructor so that the university sanctioned assistance can be provided.

**Scale**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90-100</td>
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<tr>
<td>B</td>
<td>80-89</td>
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<tr>
<td>C</td>
<td>70-79</td>
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<tr>
<td>D</td>
<td>60-69</td>
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<tr>
<td>F</td>
<td>0-59</td>
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Grades of C or higher indicate preparedness to progress to courses for which this is a prerequisite. A grade of B or higher indicates an ability to explain procedures. A grade of A indicates the ability to extrapolate from these skills to solve related problems.

**Academic Expectations**

**Lessons**: If you do not understand any part of a lesson or an assignment, please ask for assistance before the assignment is due. You must provide a specific description of the difficulty: instructors cannot read your mind.

**Instructions**: If you do not understand any instruction or a question, please ask before the work is due. An assignment may be submitted only once.

**Corrections**: If you discover a mistake in any graded work, please bring it to the attention of the instructor as soon as possible.

**Incomplete assignments**: Homework not turned in on time receives no credit. Please arrange excused absences for exams before the exam if at all possible. If you cannot make arrangements before the exam, then the final exam grade will replace that exam score. If the university is closed for an emergency on an exam day, the exam will occur on the next class session.

**Attendance**

Daily attendance is vital to success in this course. Some material is covered in neither the textbook nor online materials.

If you will be required to miss class for university business, including but not limited to athletics and forensics, please inform the instructor at the beginning of the semester or session.

Failure to attend for more than 4 class periods may be regarded as withdrawal and a faculty initiated drop may be processed. Attendance is recorded by submission of assignments.

Most graded assignments are returned at the beginning of class. If you miss this, you will need to come to the instructor’s office to obtain the assignment. All assignments not collected by the final exam will be destroyed as required by FERPA.
**Courtesy**

Courtesy in the classroom is important for learning. Entering a classroom late may disturb other students. Please be prompt. If you need to leave class early, please inform the instructor before class. Lack of attention to the material of the class reduces learning. Use of any communication device or method not requested by the instructor is not permitted. Music playing devices, hands-off phones, and other headset type devices may not be worn during class. Use of any device during a quiz or test will result in a grade of zero and possible charges of cheating. Students required to be on call must notify the instructor ahead of time and use a silent notification method.