MATH 103-F61: Concepts and Contemporary Applications of Mathematics (3 cr.)
Summer Session 2013 (May 28th to July 3rd 2013)

Times and Location: MTWR 10-11:50 a.m. GRUE 304

Instructor: Dr. Anthony Rickard

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Office Hours: MTWR 12:30-1:30 pm and by appointment.

Course Text: *Excursions in Modern Mathematics* (7th Edition), by Peter Tannenbaum. Additional materials and required readings will be distributed in class.

MATH 103 is intended to provide an introduction to how mathematics can be used to analyze and understand the natural world and human society. A variety of mathematics and applications will be explored, with extensive use of hands-on activities. Emphasis will also be placed on developing and refining problem-solving skills and making connections between mathematical concepts and procedures.

**Course Requirements**

Cell phones should be turned off during class. There will be a short break about halfway through each class during which you can check messages, text, make calls, etc.

**Quizzes.** Six quizzes will be administered during the term. Each quiz is worth 50 points and will cover material for one or two chapters from the course text. Quizzes will consist of problems and possibly short answer questions. Calculators may be used during quizzes but not cell phones nor computers. All quizzes are closed book and closed notes.

**Homework.** Five homework assignments will be given during the term. Each homework assignment is worth 20 points. Homework assignments will typically consist of problems from the text and will be evaluated on validity of answers, completeness of work, and reasoning supporting the answers. Homework assignments should be organized and solutions to problems presented in the order that the problems are assigned, with complete work shown in a clear, logical, and legible format, with the final answer circled. Homework assignments should also be stapled. Homework assignments that do not conform to these guidelines will not be graded and will not receive any credit.

**Final Exam.** The comprehensive final for MATH 103 is worth 100 points. The final exam will be administered on July 3rd 2013 from 10-11:50 a.m. You may use a calculator on the final exam but not a cell phone nor a computer. The final exam is closed book and closed notes.
Grading Distribution

6 quizzes @ 50 points each: 300
5 homework assignments @ 20 points each: 100
Comprehensive Final Exam: 100
Total points possible: 500

Grading Policy

450 – 500 points: A
400 – 449 points: B
350 – 399 points: C
300 – 349 points: D
299 points or less: F

Attendance Policy

Attendance will be taken at the beginning of each course meeting. You are encouraged to attend all course meetings. However, students are allowed a total of five (5) absences during the term. Missing more than five (5) course meetings will result in failing MATH 103.

Additional Course Policies and Information

Department of Mathematics and Statistics (DMS) course policies will be observed in MATH 103. These policies include:

• Incomplete grades will only be given if a student has completed the substantial majority of the course with a grade of C or better and, for extenuating circumstances beyond her or his control, is unable to complete the course.
• Late withdrawals will only be granted in cases where a student has performed at a level of C or better and has exceptional reasons for withdrawal that are beyond her or his control.
• The final exam will not be administered earlier or later than the date and time published in the official schedule and/or in this syllabus. Individual exceptions are possible only in exceptional circumstances.

Regarding homework and chapter quizzes.

• All homework assignments will be collected at the beginning of class on the date the assignment appears on the syllabus. Late homework will not be accepted except under extenuating circumstances. Contact the instructor immediately if you will be unable to complete a homework assignment on time.
• Chapter quizzes will be administered on the dates shown in the syllabus. The instructor will announce any changes to the chapter quiz schedule in advance. If you believe you will be unable to complete a chapter quiz on the scheduled date due to extenuating circumstances beyond your control, see the instructor immediately.
Finally, all students are expected to adhere to the UAF Student Code of Conduct in MATH 103. Consult the academic catalog or see the instructor if you have questions. Also, see the DMS webpage for additional policies and information, including the Summer Sessions schedule for the Math Lab in CHAP 305, at www.uaf.edu/dms. Qualified students who desire additional assistance with MATH 103 may check with Student Support Services or the Office of Disability Services. Students are encouraged to form study groups for MATH 103 and/or seek additional assistance from the instructor or the DMS Math Lab if needed.

**Course Calendar**

5/28: Introductions, overview of the course, and problem solving.


5/30: Chapter 1 and Chapter 2 continued.

6/3: Complete Chapters 1 and 2.

6/4: Homework #1 due, quiz #1 over Chapters 1 and 2, and begin Chapter 9: The Mathematics of Spiral Growth.

6/5: Chapter 9 continued.

6/6: Complete Chapter 9.

6/10: Homework #2 due, review Chapter 9, quiz #2 over Chapter 9.


6/12: Chapter 10 continued.

6/13: Complete Chapter 10, review Chapter 10, quiz #3 over Chapter 10.


6/18: Chapter 11 continued.

6/19: Complete Chapter 11, homework #3 due (over Chapters 10 and 11), quiz #4 over Chapter 11.

6/20: Begin Chapter 14: Descriptive Statistics.

6/24: Chapter 14 continued.

6/26: Review Chapter 14, homework #4 due, quiz #5 over Chapter 14.


7/1: Chapter 15 continued.

7/2: Complete Chapter 15, homework #5 due, quiz #6 over Chapter 15.

7/3: Final Exam.