MATH 170-007 [Finite Mathematics]   Spring 2016

Instructor: Mr. Robert R. Vandermolen   OFFICE HOURS:

Office: LC 123 b   11:00-12:00 MTWTR

 e-mail: robertv@math.sc.edu   and by appointment.

Textbook and materials:

- *Finite Mathematics, Sixth Edition (available online via the WebAssign eBook)* by Waner and Costenoble.
- *WebAssign access.* Most homework will be online through WebAssign. You will need to register for the WebAssign course ASAP. Register yourself online using the Class Key **sc7796 7534** on the website: https://www.webassign.net/login.html. You can use WebAssign free for two weeks (from the first day of class), but must buy access before the end of the two weeks in order to keep working.
- *Calculator*: Any solar calculator will be allowed but it is strongly recommended that you get a graphing calculator that does NOT have a CAS (computer algebra system), preferably a TI-83 or TI-84. Use of a calculator with CAS or a phone calculator is cheating so: NO TI-inspire, NO TI-89, NO TI-92, etc.

The Wisdom of a Teacher (not me):

"Most of my students do not buy a paper textbook as the entire text is available on WebAssign. The problems in the paper book are all in WebAssign, plus some extras. In case students ask, they can buy access directly from the WebAssign site using a credit card (cheapest), or use an access code they buy in the bookstore (mostly for students with certain types of scholarships). Please warn them that buying access codes on the internet is not a good idea!"

Prerequisites: Earned by grade of C or better in MATH 111/111I or 112, or by a at least a grade of 14 on the Algebra Placement Test, or at least a grade of 19 on the precalculus placement test.

Objectives: To give students the critical thinking tools necessary to engage effectively the technical paradigms of today's global information society. OR To make you stop worrying and fall in love with the bomb….(you're in college now, know things)

Outcomes:

- Demonstrate the use of basic mathematics terms related to matrices, matrices, linear programming, combinatorics, probability, game theory, Markov chains, logic, and set theory.
- Apply concepts and methods to problems involving linear optimization, various forms of permutations and combinations, probability, game theory, Markov chains, logic, and set theory problems
- OR TAKE OVER THE WORLD!!!

Grading: There will be quizzes (online, I will drop the lowest grade), homework (online, I will drop the lowest 3 grades), tests (in class), class work (in class), and a final exam (in class). The student's final grade will be weighted in the following way (grades will be available on Blackboard):

Quizzes: 10%

Homework: 10%

Tests: 45%

Final Exam: 25%

Class Participation/Attendance/Group Work: 10%

A: 90% – 100%   B: 80% – 89.99%   C: 70% – %79.99   D: 60% – 69.99%   F: Below 60%

You will get a B+, C+, or a D+ if your grade is at least an 87, 77, or 67 respectively

TEST DATES (may change, attend class for updates): February 10th, March 16th, April 16th

LAST DAY to withdraw without a grade of W: Tues. January 19th

LAST DAY to drop a course or withdraw without a grade of WF: Thurs. March 3rd

FINAL EXAM DATE: Wednesday, April 27th, 4 p.m.

For more information on important dates see, http://registrar.sc.edu/html/Calendar/

CLASS POLICIES:

1. **Attendance** will be taken every day and counted towards your final grade. You are allowed to miss 3 unexcused lectures without deduction of your grade, each *additional absences will account for a 2.5% deduction from your attendance grade* (you are not allowed to miss a test) excused absences will need proper documentation, and as always is up to the discretion of the instructor.

2. **Absences from tests:** excused absences for a test will only be in an emergency basis, and the student will need to provided proper documentation. As always the instructor always maintains the right to make the final decision.

3. You are responsible for what goes on in class, whether you are there or not. If you miss a day of class, check WebAssign and Blackboard, or make a friend in class.

4. Please turn off all electronic devices before entering class. If you must text, please go outside the classroom.

5. **NO late assignments will be accepted**, see the grading policy, I drop some quizzes and homeworks,

these will used instead of late assignments.

6. If you have a **LEARNING DISABILITY** which will affect this class, you should contact SDS at https://www.sa.sc.edu/sds/ . A student that may apply should contact the SDS as soon as possible concerning accommodations one needs, also contact me as well and these will be accommodated.

7. Keep all your tests. Errors in the computer cannot be changed unless you have the originals.

8. Do not use red or pink ink or red or pink pencils on tests. Blue or black pencils or pens preferred. You are expected to bring pencils or pens sufficient to complete the test.

9. I will and expect you to conduct yourselves following the **Carolina Creed**, which can be found at http://www.housing.sc.edu/creed/index.html

10. **MATH LAB:** There is a *free walk-in tutoring lab in LeConte 105*, open Monday-Friday 10:00 am-1:00pm. There are also *paid* one-on-one math tutors available. For more information about either the lab or hiring tutors, see http://www.math.sc.edu/math-tutoring-center

11. **Student Success Center:** The student success Center offers a range of free services, from online to in person tutoring, for many of your classes as an undergraduate here at the University of South Carolina, I suggest you look through the website to see what would be most helpful for you, at http://www.sa.sc.edu/ssc/peertutoring/

SYLLABUS (Note: Adjustments may be made in case of time constraints.)

Appendix A: **Logic:** Sections 1 - 3 [additional notes and problems available on Blackboard]

Chapter 6: **Sets and Counting:**   Sections 1 - 4

Chapter 7: **Probability:** Sections 1 - 5

Chapter 3: **Systems of Linear Equations and Matrices:** Sections 1 - 3

Chapter 7: **Markov Systems:** Section 7

Chapter 4: **Matrix Algebra and Applications:** Sections 1 - 4

Chapter 5: **Linear Programming:** Sections 1 - 5

Chapter 8: **Random Variables and Statistics:** Sections: 1-5 (if we have time)

Academic dishonesty (The Dude does not abide)

Students may find FAQs about the University's policy on academic dishonesty (by which I will abide if an incident occurs) at http://www.housing.sc.edu/academicintegrity/stufaq.html

To conclude I would like to thank you for reading all of this and stay hip and cool and all that jazz, and watch old Disney movies not reality tv.