# MATH 170: SECTION 001 - SPRING 2018 FINITE MATHEMATICS 

Lecture: M, W, F 8:30am-9:20am HAMILTON 143<br>Instructor<br>Duncan Wright<br>dw7@email.sc.edu<br>LeConte 400K<br>Office Hours: Tuesday 1-2:30pm and Thursday 9-10:30am (or by appointment)

Course Description: The goal of this course is to give an introductory overview of a few selected topics in mathematics. The lectures will be used to cover new materials. The student is expected to read the section to be covered prior to the lecture. The instructor will present new and additional material, answer questions and work examples. Homework will be assigned to each main lecture and will be due one week following the lecture. There will be $10-12$ quizzes in the course which will cover the homework problems assigned and will allow the student to have constructive feedback from the instructor before the exams.

Learning Outcomes: Upon completion of Math 170, the student will be able to apply the methods of mathematics, statistics, probability, or analytical reasoning to critically evaluate data, solve problems, and effectively communicate findings verbally, graphically and algebraically (when applicable). They will exhibit mastery of elementary matrix theory, systems of linear equations, permutations, combinations, probability, Markov chains, linear programming and game theory. Additionally, they will gain the conceptual understanding and skills needed to solve real-world problems related to business, economics, and the social sciences.

Calculators: A graphing calculator is required for this course. The TI-84 Plus is recommended, but the TI-83, TI-86, TI-89 and TI-Nspire will work just fine.

Text(s): S. Waner, S.R. Costenoble; Finite Mathematics, 6th ed., Brooks/Cole, Boston, MA, 2014. The standard edition and the USC custom edition are both acceptable. Furthermore, the eBook, which is included with access to WebAssign, will be sufficient for the course. To enroll in the class on WebAssign, go to http://www.webassign.net/ and click on enter class key in the top right corner. The class key is sc 2641 4076. You will also need to purchase a course bundle through WebAssign, or alternatively you can purchase a bundle including the text and an access code through the University Bookstore.

Date(s): Last day to drop without a W is January 22, 2018. Last day to drop without a WF is March 9, 2018. The final exam is scheduled for Friday, May 4, 2018 at 9:00 am.

## Grade Distribution:

| Quizzes | $25 \%$ |
| :--- | :--- |
| Homework | $15 \%$ |
| Midterm Exam I | $12 \%$ |
| Midterm Exam II | $12 \%$ |
| Midterm Exam III | $12 \%$ |
| Final Exam | $24 \%$ |

## Letter Grade Distribution:

$$
\begin{array}{ll|ll}
>=90.00 & \mathrm{~A} & 70.00-74.99 & \mathrm{C} \\
85.00-89.99 & \mathrm{~B}+ & 65.00-69.99 & \mathrm{D}+ \\
80.00-84.99 & \mathrm{~B} & 60.00-64.99 & \mathrm{D} \\
75.00-79.99 & \mathrm{C}+ & <=59.99 & \mathrm{~F}
\end{array}
$$

## COURSE POLICIES AND EXPECTATIONS

Participation: Participants are expected to attend every class meeting and to get involved in the discussion. We will learn much more if we explore the mathematics together. Out-of-class participation is also expected, so read the text and other classroom materials. Get to know the other students in class; exchange phone numbers; work together on assignments; and give each other moral support.

Cell Phones: Make sure that your cell phone is off and away during our sessions.
Attendance: Attendance is mandatory for those wishing to do well in the course. Attendance will not be taken into consideration when determining grades.

Academic Integrity: I expect you to familiarize yourself with the Honor Code found in the current student handbook. Keep in mind that Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline.

Students with Disabilities: Students who would like to request accommodations for disabilities must talk to me as soon as possible. Students must register with the Office of Student Disability Services before I can make any accommodations.

Make-Up Policy: Exams can be made up ONLY in the case of an emergency, and ONLY if you request a make-up exam before the scheduled time. It is your responsibility to contact me within a reasonable time to request a make-up exam. No make-up quizzes will be given, but the lowest two quiz grades will be dropped at the end of the semester.

Online Homework: The online homework will be available through www.webassign.net. You must sign up using the course key sc 26414076 . The copy of the textbook which comes with access to the online homework system is sufficient.

## ADDENDUM

## TESTING AND GRADING POLICIES

Below I will outline my testing and grading policies. Of course, policies can (and may) change as the semester progresses - I will let you know if this is to occur.

QUIZZES One quiz will be given weekly. In general you can expect 3-4 questions on the quiz and you will have 15 minutes to complete them. Questions for the quizzes will be selected to reflect the material covered in the past 2-3 classes. Doing your homework and understanding the nature of the homework problems assigned is the best way to prepare for quizzes. In fact, homework problems will commonly double as questions for the quizzes.

EXAMS Midterm Exams:
Midterm exams will be given monthly (see below). A typical exam will have $8-10$ exercises covering the material and you will be given 50 minutes to complete it.

Exam Grading:
Each exercise will be assigned a number of points indicated on the exam. Full credit will show that you had full understanding of the question and did all math properly. Missing a few points will indicate that the understanding of the question was there, but some math was done incorrectly. The correct answer with no work will receive 0 points.

OUTLINE The course outline below is a tentative schedule of when we will cover certain sections and when the midterm exams are to be expected. This is subject to change depending on the speed at which the course needs to run. It will be updated periodically on Blackboard.

| Class \# | Date | DAY | Proposed Topic |
| :---: | :---: | :---: | :---: |
| 1 | 01/17 | W | SYLLABUS |
| 2 | 01/19 | F | CHAPTER 1 |
| 3 | 01/22 | M | 3.1 |
| 4 | 01/24 | W | 3.1 |
| 5 | 01/26 | F | 3.2 |
| 6 | 01/29 | M | 3.2 |
| 7 | 01/31 | W | 3.3 |
| 8 | 02/02 | F | 4.1 |
| 9 | 02/05 | M | 4.1-4.2 |
| 10 | 02/07 | W | 4.2 |
| 11 | 02/09 | F | 4.3 |
| 12 | 02/12 | M | 4.3-4.4 |
| 13 | 02/14 | W | 4.4 |
|  | 02/14 | W | REVIEW |
| 14 | 02/16 | F | EXAM I |
| 15 | 02/19 | M | 5.1 |
| 16 | 02/21 | W | 5.1-5.2 |
| 17 | 02/23 | F | 5.2 |
| 18 | 02/26 | M | 6.1 |
| 19 | 02/28 | W | 6.1-6.2 |
| 20 | 03/02 | F | 6.2 |
| 21 | 03/05 | M | 6.3 |
| 22 | 03/07 | W | 6.4 |
| 23 | 03/09 | F | REVIEW |
| 24 | 03/19 | M | EXAM II |
| 25 | 03/21 | W | 7.1 |
| 26 | 03/23 | F | 7.2 |
| 27 | 03/26 | M | 7.2 |
|  | 03/26 | M | 7.3 |
| 28 | 03/28 | W | 7.3-7.4 |
| 29 | 03/30 | F | 7.4 |
| 30 | 04/02 | M | 7.5 |
| 31 | 04/04 | W | 7.6 |
| 32 | 04/06 | F | 7.6 |
| 33 | 04/09 | M | 7.7 |
| 34 | 04/11 | W | 7.7 |
| 35 | 04/13 | F | REVIEW |
| 36 | 04/16 | M | EXAM III |
| 37 | 04/18 | W | TBD |
| 38 | 04/20 | F | TBD |
| 39 | 04/23 | M | TBD |
| 40 | 04/25 | W | TBD |
| 41 | 04/27 | F | REVIEW |
| 42 | 04/30 | M | REVIEW |
| 43 | 05/04 | F | FINAL EXAM |

