

NORTH CAROLINA STATE UNIVERSITY
DEPARTMENT OF MATHEMATICS
MA 103 Spring 2019

Course coordinator: Molly Fenn (mafenn2@ncsu.edu)

Course description: Primarily for students in Humanities and Social Sciences. Illustrations of contemporary uses of mathematics, varying from semester to semester, frequently including sets and logic, counting procedures, probability, modular arithmetic, and game theory.

Text: The textbook for this course is a pdf file which will be pre-loaded into WebAssign for the students. Students will have access to it once they register with WebAssign.

Homework: Webassign is used for homework.

Tests: There are 4 tests scheduled for the course. If you choose you can instead give 3 tests.

Final grade calculation: One example of a grading distribution is below. You may modify it for your class, if desired. Four tests and a final exam are scheduled; each instructor may in addition assign a paper or a project to use as an extra test or in place of a test. Webassign will be used for a homework grade.

Homework:	20%
Tests:	60% (15% for each or 20% each if only 3 tests)
Final exam:	20%

Letter grades: This course uses standard NCSU letter grading (with NO ROUNDING):

$90 \leq A^- < 93$	$93 \leq A < 97$	$97 \leq A^+ \leq 100$	
$80 \leq B^- < 83$	$83 \leq B < 87$	$87 \leq B^+ < 90$	
$70 \leq C^- < 73$	$73 \leq C < 77$	$77 \leq C^+ < 80$	
$60 \leq D^- < 63$	$63 \leq D < 67$	$67 \leq D^+ < 70$	$0 \leq F < 60$

Schedule: The schedule below is meant as a suggestion. You may need to modify it slightly based on your class. We suggest that a lot of time be spent in working problems with the students.

Dates	Text Chapter	Topic
Weeks 1-3 (1/7-1/25) (No class 1/21)	Chapters 1 and 2	Voting Systems, Weighted Voting Systems
Week 4 (1/28-2/1)	Review and TEST 1	
Weeks 5 and 6 (2/4-2/15)	Chapters 3 and 4	Fair Division, Apportionment
Week 7 (2/18-2/22)	Review and TEST 2	
Weeks 8 and 9 (2/56-3/8)	Chapters 5 and 6	Euler Circuits, Hamilton Circuits
Spring Break		
Week 10 (3/18-3/22)	Review and TEST 3	
Weeks 11, 12, and 13 (3/25-4/12)	Chapters 7 and 8 and Review	Minimum Networks, Scheduling Problems
Week 14 (4/15-4/18) (No class 4/19)	TEST 4	
Weeks 14 and 15 (4/15-4/26)	Chapter 9 and Review	Sequences