

MA 225:SUMMER 2019

TEXT: A TRANSITION TO ADVANCED MATHEMATICS

By Smith, Eggen & St. Andre, 8th edition

INSTRUCTOR: R. FULP

OFFICE HOURS:9:30-10:30 every day except Wed SAS 4232,

E-MAIL: fulp@math.ncsu.edu (I check my e-mail before class every day)

Essential Course Content

Chapter 1 Logic and Proof

Propositions and Connectives

Conditionals and Biconditionals

Quantifiers

Proofs

II. Chapter 2: 2.1-2.5 Set Theory

Basic Ideas

Set Operations

Extended Set Operations

Mathematical Induction

III. Chapter 3: 3.1-3.3 Relations

Cartesian Products

Relations

Equivalence Relations

IV. Chapter 4: 4.1-4.4 Functions

Functions as Relations

Construction of Functions

1-1 and onto Functions

V. Chapter 5: 5.1-5.3 Cardinality

Finite and Infinite Sets

Countable and Uncountable Sets

FURTHER DETAILS:

HOMEWORK WILL BE DONE VIA TEAMS WITH ABOUT 2 or 3 PER TEAM.

IT IS EXPECTED THAT EVERY MEMBER OF THE TEAM DO ALL THE HOMEWORK OR AT LEAST MAKE A SERIOUS ATTEMPT TO DO SO, BUT ONLY ONE MEMBER OF THE TEAM WILL WRITE UP THE ASSIGNMENT TO BE TURNED IN.

HOMEWORK DATES WILL BE ASSIGNED IN CLASS DAY BY DAY.

POP-QUIZZES MAY BE GIVEN AT RANDOM COVERING DEFINITIONS AND PROBLEMS DONE FOR HOMEWORK OR SIMILAR PROBLEMS

FINAL EXAM: Monday July 29 , 8:00-11:00 SUBJECT TO CHANGE

GRADING

THREE IN CLASS TEST GRADES 18% EACH

HOME WORK & QUIZZES 18%

FINAL EXAM GRADE 28%

Grading scale : Plus and minus grades are given sparingly. The highest A is given an A+ and the lowest A an A-, with a similar distribution for B's, C's, and D's. The scales are: 90-100 gets you an A, 80-89 a B, 65-79 a C, and 55-64 a D. Grades below 55 result in an F.

Absences : You are expected to attend every day. No make-ups for homework assignments, quizzes, tests, or the final exam are given except in case of DOCUMENTED illness or deaths.

Class Policies

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (REG02.20.1). It is my understanding and expectation that your signature on any exam or assignment means that you have neither given nor aid.