

MATH 3003

TRANSITION TO ADVANCED MATHEMATICS

Fall 2007

Instructor: Dr. B. Landman

Section: 01

Class Times: T, R 12:30-1:45

Place: Business 40

Office: 310 Boyd

Office Hours: T,R 11:30-12:30, 1:45-2:30, or by appointment

Phone: 678-839-6489

Textbook: A Transition to Advanced Mathematics, Sixth Edition, by Douglas Smith, Maurice Eggen, Richard St. Andre

Prerequisite: MATH 2644 with a grade of C or better

Learning Outcomes:

Upon successful completion of the course, the student will be able to

- (1) demonstrate an understanding of basic symbolic logic by translating English sentences to formal logical expressions and translating formal logical expressions to equivalent English sentences.
- (2) state the basic definitions and use the notation of set theory.
- (3) state the basic definitions, properties, and use the notation of functions.
- (4) use mathematical arguments, including direct proofs, proofs by contradiction, proofs by induction, and proofs by contrapositive to prove facts about sets, functions, and numbers
- (5) demonstrate that he/she can comprehend symbolically written mathematics by explaining in his/her own words definitions, statements of theorems, and other mathematically written sentences.
- (6) write facts, arguments, and/or questions about mathematics using correct grammatical style for mathematical text.

Grading Procedure :

There will be four 50-minute tests, a cumulative final exam, and approximately 12 short quizzes. The final grade for the course will be determined as follows:

Quizzes	20%
3 Highest Tests	50%
Final Exam	30%

Grading Scale: A: 89-100 B: 78-89 C: 67-78 D: 56-66 F: 0-56

Test Policy: The lowest of your four 50-minute test scores will be dropped. There will be no make-up tests. If one test is missed, this will be considered as the test with the lowest score, and will be the test that is dropped. A second (or more) missed test will be given a grade of F.

Quizzes: The lowest two quiz grades will be dropped. Missed quizzes get a grade of 0 out of 10, up to two of which will be dropped. No make-up quizzes will be given.

Homework:

Homework will be assigned during each class meeting. It is to be completed by the next class meeting. Although homework will not be collected or graded, it is ESSENTIAL to your success in the course that you do the homework regularly, and on time. Part of each homework assignment is to read the corresponding material in the text.

Academic Honesty:

Any act of academic dishonesty on one of the quizzes, tests, or the final exam will result in an F for the course.

Classroom etiquette:

It is important that every student and the instructor be able to learn and work in an atmosphere conducive to learning. For this reason, interruptions, excessive noise, or other potentially distracting behavior should not take place during the scheduled class time. The following are not allowed during class time (12:30-1:45): cell phones ringing, beeping, etc. (all cell phones must be off!); eating or drinking; conversation not relevant to class discussion; sleeping; excessive tardiness; leaving class early without prior notice to the instructor; any other disruptive behavior. Violations of these rules will be handled as follows: (a) 1st or 2nd violation: warning (b) 3rd violation: student will be dropped from class and receive a W (or WF if after the deadline for withdrawal without penalty).

Other:

It is strongly recommended that you allow at least six hours each week, outside of class, for homework and study (more would be better).

Important Dates:

August, 21, Tuesday: Last day for Drop/Add
September 6, Thursday: Test 1
October 2, Tuesday: Test 2
October 8, Monday: Last day to withdraw with a W
October 30, Tuesday: Test 3
November 27, Tuesday: Test 4
December 13, Thursday: Final Exam

ASSIGNMENTS

<u>Section</u>	<u>Exercises</u>
1.1	1a-j, 3-10
1.2	1-6,8-12,13a-f,14
1.3	1-8,10,12
1.4	3-5,6a,b,c,7a-g,8,11
1.5	1,2,3a,b,d,e,f,4,6,7a,12
1.6	1,2a,b,3,5a-g,7a-f,8
1.7	1a,b,2a,3a,b,c,12c,d,e
2.1	1-19 (read solution to 18 in back of book)
2.2	1-7,8a,c,e,g,i,k,o,9b,c,d,10a,b,c,11a,b,12b,c,14a,b,15a,b,16a,c,d,17
2.3	1a-h,j,l,m,2a-h,j,l,m,3,4,9,10,11a,20
2.4	1,2,3b,4a,c,d,5a,c,6a,b,c,8a-f,k,l,o,10,15a,b,c,f
3.1	1,2,5,6a-e,8,9,10,20a-e
3.2	1,4a,c
4.1	1-5
4.2	1,3
4.3	1a-h,2