

COURSE OUTLINE FOR TSCHRITTER'S MATH 109 Spring 2005

Text: Finite Mathematics
Sixth Edition
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CHAPTER 1 : FUNCTIONS AND LINES

#	Text	Time	
1	1.1,1.2	1	Functions, graphs and lines
2	1.3	1-	Mathematical Models and applications of linear functions

CHAPTER 2 ; LINEAR SYSTEMS

#	Text	Time	
3	2.1	1.5+	Systems of two equations
4	2.2	2.5-	Systems of three variables; Matrices
5	2.3	4- -	Gauss-Jordan method for general systems

TAKE-HOME TEST H1

6	2.4	.5	Matrix Operations
7	2.5	.5++	Multiplication of matrices
8	2.6	2 - -	Inverse of a Matrix
9	2.7	1+	Leontief Input – Output Model
		1	TUTORIAL
		1	TEST # 1 , Lessons 1 to 9

CHAPTER 3 : LINEAR PROGRAMMING

#	Text	Time	
10	3.1	.5	Linear Inequalities in two variables
11	3.2	.5	Systems of inequalities, a geometric picture
12	3.3	1+++	Linear Programming: a geometric approach

CHAPTER 4 : LINEAR PROGRAMMING: THE SIMPLEX METHOD

#	Text	Time	
13	4.1	1 - -	setting up Simplex Method
14	4.2	2 - -	Simplex Method
15	4.4	1+	Mixed Constraints
16	4.5	1	Multiple, Unbounded, and no solutions

CHAPTER 6 : SETS AND COUNTING

#	Text	Time	
17	6.1	.5++	Sets
18	6.2	.5++	Counting Elements in a Subset Using Venn diagrams
19	6.3	2 - -	Basic Counting Principles
			TAKE HOME TEST H2
20	6.4	1 - -	Permutations
21	6.5	1	Combinations
22	6.6	1	a Mixture of Counting problems
			TUTORIAL
		1	TEST #2 , LESSONS 10 to 22

CHAPTER 7 + SECTION 8.6(PROBABILITY)

#	Text	Time	
23	7.1	1 - -	introduction to Probability
24	7.2	1 - -	Equally Likely Events
25	7.3	1+	Compound Events: union, intersection, & complement
26	7.4	2	Conditional Probability
27	7.5	1+	Independent Events
28	7.6	1	Baye's Rule
29	8.6	1	Binomial Distribution
30	7.7	2 - -	Markov Chains

TAKE – HOME TEST H 3

CHAPTER 10 : LOGIC

#	Text	Time	
31	10.1	1 -	Statements
32	10.2	1++	Conditional Statements
33	10.3	1 - -	Equivalent Statements
34	10.4	1+	Valid Arguments
		1	TUTORIAL
		1	TEST # 3 , LESSONS 23 to 34

CHAPTER 8 : STATISTICS

#	Text	Time	
35	8.1	1+	Frequency distributions
36	8.2	1 -	Measures of Central Tendency
37	8.3	2	Dispersion: Range, Variance & Standard Deviation
38	8.4	1-	Random variables & Probabilty distributions of Discrete Random Variables
39	8.5	1--	Expected Value
40	8.7	1+++	Normal Distribution
41	8.7	1	Using Normal distribution to approximate Binomial distribution

TAKE-HOME TEST H4

1 TEST 4 , LESSONS 35 to 41

CHAPTER 5 : MATHEMATICS OF FINANCE

#	Text	Time	
42	5.2	1	Compound Interest
43	5.3-5.4	2 - -	Annuities

TUTORIAL

2 ? REVIEW

Length of Semester = 68 hours

FIRST DAY HANDOUT FOR Rich Tschritter's MATH 109 STUDENTS
My office is E-268, my e-mail is Tschritter@camosun.bc.ca , my home phone is 475-0659

Welcome to my class. I hope that the term goes well for you. Please take some time to read the following. I think you will find it helpful and informative.

A. SOME GENERAL COMMENTS

1. HOW IMPORTANT IS REGULAR ATTENDANCE? It is essential that you attend every class. If for some reason you miss a class, you will need to act quickly to get caught up. Get a copy of the notes from one of your classmates. Work through the notes very carefully.
2. PLEASE try to arrive a minute or two before class is scheduled to begin. This will give you an opportunity to get your notes out, and to prepare mentally for the class.
3. HOW MUCH TIME SHOULD I BE SPENDING ON MATH EVERY WEEK? If up to date, a typical student will need to spend a minimum of 60 minutes per day. It is highly preferable that this be done before the next class.
4. CALCULATORS. Graphing and programmable calculators may **not** be used on any test or on the final exam. Also no ELECTRONIC translators are allowed on TESTS.

B. HOW TO GET HELP

1. Please come to my office (Ewing 268) for help. I will be at school by 8:30 am on Monday – Thursday, Monday-Thursday 11:30 am-12:00 noon and Friday 10:00 am -12:00 noon. Should you require help after class please see me.
2. I strongly urge you to find one or more people in this class who you can study with. For many people, learning mathematics in a social setting with their peers can be very rewarding and productive.
3. Free tutoring is available in The Math lab, Ewing 224 during the day. The lab is open all day and sometimes over the weekend. Although the lab is a great place to go when you are confident of the subject matter in general but you just need a little push in the right direction, I would strongly suggest that you use me first, especially at the beginning of the course. Between us we can work out a strategy for determining what kinds of questions you should always bring to me, and what kinds could be safely answered in the lab.

(over)

C. EVALUATION PROCEDURES FOR THE COURSE

1. TERM MARK. You will be doing a number of take-home tests. These can be done in consultation with other students in your class, but with the help of nobody else. **They will be overdue if not handed in at the beginning of the class on the due date, but can be handed in up to one day late with 10 % mark deduction.**

The term mark is the average of the scores on your in-class tests(35%) and take home tests(15%). However, if your class work is satisfactory, that is > 60%you will be allowed to throw out your worst test before the average is calculated.

If you miss an in-class test for ANY reason, you will get a zero.

There will be no make-ups. But with decent take-home test scores, that zero will be tossed out.

2. FINAL EXAM. The final exam for this course is to be written by all students on the day and time scheduled. The examinations for this term will be held in April 2005. Please make sure you are available during this period.

3. MARK FOR THE COURSE. Your course mark is the larger of:

- a) The average of your term mark and your final exam mark (each is worth 50%) Note: The take-home tests are worth 15 % and the class Tests are 35 %.
- b) Your final exam mark ie. If your final exam mark is the better score and you have

attended regularly and handed in all assignments and not missed any quizzes.

The Math Department reserves the right to raise your course mark if it is judged that your in-class tests and final exam were more difficult than those in other years or other sections.

4. LETTER GRADE. Your course mark is then translated to a letter grade using the following table:

A+ 95-100%	B+ 80-85%	C+ 65-70%
A 90-95%	B 75-80%	C 60-65%
A- 85-90%	B- 70-75%	D 50-60%