

MA 100-01

TR 11:00-12:20

Fall 2000

Bro. Fred

DATES		TOPIC	TEXT	
Aug	29	Problem solving	1-1	
	31	" "	1-2	
Sep	5	Reasoning	1-3	
	7	Scientific notation	1-4	
	12	Deductive reasoning	2-1	
	14	Truth tables, the conditional	2-2	
	19	Laws of logic	2-3	
	21	Nature of proof	2-4	Project title due.
	26	Early numeric systems	3-1 to 3-3	
	28	Computers and binary	3-5	
Oct	3	Midterm Test		
	5	Natural and prime numbers	4-1 to 4-2	
	10	Integers, fractions, irrational	4-3 to 4-6	
	12	Algebraic expressions	5-1	Paragraph describing project due.
	17	Spreadsheets	5-3	
	19	Similar and right triangles	7-4	
	24	Golden rectangles	7-5	
	26	Network problems	7-6	
	31	Interest	6-1	
Nov	2	Installment buying	6-2	
	7	Midterm Test		
	9	Probability	9-1	
	14	Mathematical expectation	9-2	Detailed project description due.
	16	Models	9-3	
	21	Counting formulas	9-4	
	23	<i>(no classes)</i>		
	28	Calculated probabilities	9-5	
	30	Frequency distributions	10-1	
Dec	5	Descriptive statistics	10-2	
	7	<i>(Class examines and evaluates all of the term projects)</i>		
		FINAL: Wed Dec 13, 8:00 a.m.		

HOMEWORK: All homework assignments will be due at the beginning of the following class. Homework that is late by one class period will receive half credit; later than that it will receive no credit.

ATTENDANCE is expected at all class periods. If you arrive late, you may miss the count, and be recorded as missing; it is up to you to make sure that this is corrected immediately after class. Corrections will not be made later, unless I CLEARLY remember your presence.

ABSENCE from class does not excuse you from any homework. If an absence is due to a serious illness or emergency, see me about making up the homework, etc., when you get back. Holiday trips home or to neighbor islands do not count as emergencies.

A TERM PROJECT will be expected. You may choose from any of the "individual research" or "group research" suggestions in the textbook, or you may suggest your own topic (but get my okay before starting serious work on it). *This is not to be a term paper!* Think more in terms of a high school science fair exhibit. Make something for the class to look at and learn from.

Your FINAL GRADE will be based on 20% for each test, 20% for the term project, and 20% for homework and attendance. NOTE: **Make-up tests are always harder than the original!**

OFFICE HOURS: Since I have many morning classes, I will be available only in the afternoons. If you wish to see me, we can make an appointment, or you can just pop into room 24, Henry Hall.

REVIEW BEFORE TESTS: We will agree on a time and place outside of class time. Attendance will be optional.

MATH 100-01

The purpose of this course is not to present the technical details needed to proceed to the next course, but to give insight as to what mathematics is, what it attempts to accomplish, and how mathematicians think.

I realize that many elementary teachers use mathematics problems as punishment for misbehaving pupils, and thus lead many to hate mathematics. Or, teachers and classmates can ridicule a pupil who is less proficient in doing math problems, so that people come to believe that they simply cannot do math. This is unfortunate because it is usually not true.

Mathematics is considered to be a **hard** subject. I feel that it is my job to offer it to you as well as I can, and in as positive a way as I can. In this class, you will not be ridiculed, or punished with extra math problems. But I must have your assurance that you are willing to make a commitment to this course. There are two aspects to this:

1. *You must make a commitment to attend every class.* There is no such thing as a class period that is not important. If you **MUST** miss a class because of illness or a family emergency, you must take responsibility for learning what was discussed, and spending plenty of time studying the relevant section of the text. Absence does not excuse you from doing the homework.
2. *You must make a commitment to daily work.* It can take up to one or two hours each day. You cannot save up, and do 5 or 10 hours on a weekend or just before an exam; it just doesn't work that way. It is probably best if you have a set time for doing your math homework, so that you don't get tempted to keep putting it off.

If you are not willing to make this kind of commitment, you should drop the course now, and think about it. Without this kind of commitment, you risk failing the course. But if you do commit yourself, I will try to do whatever is possible to make you successful. In addition, there are two resources you can use:

- a) The Math Lab, in the basement of Henry Hall. This is a free, drop-in place to get some tutoring from students who are doing higher-level math courses.
- b) The Learning Center in the lower level of Eiben Hall. This is also a free service, but the tutors there are more experienced, and the procedures may be more formal. They may ask you to agree on a weekly appointment, for example.

Everyone at Chaminade wants you to succeed, but by hard work and genuine learning, not by looking for shortcuts and easy ways out. We will bend over backwards for those who are truly committed to learning, but will be unsympathetic toward those who try to get by without working.

FD'00

MA 103-01, 02, 03, 04

Fall 2000

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DATES		TOPIC	TEXT	HOMEWORK
Aug	28	Diagnostic test		
	30	Number properties	1.1 - 1.7	p 92, Chapter test
Sep	1	Linear functions	2.1 - 2.3	p 176, #1-10
	4	(no classes)		
	6		2.4 - 2.6	p 179, #11-20
	8	Systems of eqns	3.1	p 193, # 11-14, and #20-34 evens
	11		3.2	p 208, #12-50 evens
	13		3.3	p 221, #13-24
	15		3.4	p 231, #19-38
	18		3.5	p 242, #12-54 evens
	20	Inequalities	4.1-4.2	p 307, #1-6
	22		4.3-4.4	p 309, #7-8
	25	Midterm test -- Chapters 1-4		
	27	Polynomials, factoring	5.1 - 5.3	p 393, #1-8
	29		5.4	p 394, #9-11
Oct	2		5.5	p 395, #12-13
	4		5.6-5.7	p 395, #14-16
	6		5.8	p 387, #9, 12, 15, 18, etc, up to 60
	9	(no classes)		
	11	Rational Expressions	6.1-6.2	p 481, #1-9
	13		6.3-6.4	p 482, #10-11
	16		6.5-6.6	p 483, #12-13, and p 468, #37-42
	18		6.7	p 476, #10-62 evens
	20	Radicals	7.1	p 553, #1-3
	23		7.2	p 554, #4-9
	25		7.3	p 519, #12-64 evens
	27		7.4	p 556, #11-13
	30		7.5	p 556, #14-18
Nov	1		7.6	p 557, #19-21
	3	Midterm Test -- Chapters 1-7		
	6	Quadratic equations	8.1 - 8.2	p 619, #1-8
	8		8.3 - 8.4	p 621, #9-13
	10	(no classes)		
	13	Exponential and	10.1	p 710, #17-36
	15	logarithmic functions	10.2	p 765, #7-9
	17		10.3	p 765, #10-16
	20		10.5	p 767, #21-28
	22		10.6	p768, #29-31
	24	(no classes)		
	27	Sequences, Series	13.1	p 886, #27-60 evens
	29		13.2	p 894, #15-54 evens
Dec	1		13.3	p 901, #19-38
	4		13.4	p 952, #11-22
	6	Probability	13.6	p 953, #25-27
	8		13.7	p 954, #28-38 recommended
	14	Final: Thu Dec 14, 10:30 a.m. -- covers entire course		

Review sessions: Before midterms and final, we will arrange to have an outside-of-class review session.

Office hours: By arrangement, in afternoon hours only.

Homework: Homework is due at the next class after the dates shown above.

Homework is due whether or not the teacher remembers to remind you of it. Refer to this schedule.

Missing class does not excuse you from the homework.

Homework that is late by one class, or incomplete, will receive half credit.

After that, no credit for late homework. (See me privately for exceptions due to serious illness or serious family emergency. No exceptions for any other reasons.)

Homework that consists only of answers, and shows no work, will not receive credit (unless the problem can easily be done in a single step).

In this course, it is acceptable, even advisable, to **work together** on homework, but you must turn in your own individual homework paper.

Attendance: You are expected to be present and **ON TIME** for every class period. If you come late, you may be counted as absent; it is up to you to remedy this ON THE SAME DAY. The record will not be changed after that day.

Make-up tests are **always more difficult** than the original. Try to avoid these.

Your final grade will depend on the three tests (excluding the first day's diagnostic test) and on your homework and attendance. Your record on homework and attendance will count for one quarter of your final grade.