Syllabus for Mat2210, Fall, 2003

call number: 02–433

Periods 4(12:20–1:10pm), Boyd Graduate Studies Building, Room 222

Instructor: Ming-Jun Lai
Office: Room 408 Boyd Graduate Studies Building
Office Hours: 9:30–10:30pm Monday, Wednesday and Friday or by appointment
Phone Number: 542–2065
Text: *Calculus with Analytic Geometry*, Edwards & Penney, 6th Edition, 2003.

General Instruction

You are required to take this class with an academic honesty. To know which actions violate the University's academic honesty policy, please read the webpage at

http://www.uga.edu/deanofstudents/judicial/downloads/conduct0203.pdf.

Please attend every class, although there is no attendance requirement. There is no make-up test, unless you have an official excuse such as attending a tournament, seeing a doctor, being a juror, geting involved a car accident, etc. If you miss a class, please catch it up yourself.

Although many homework problems will be assigned, I will not collect them nor grade them. Some of the problems will be appeared in quizzes and/or tests. I will spend the first few minutes each class to answer the questions related to them.

Do not forget the withdraw deadline of Oct. 14, 2003.

This syllabus provides a general plan for the course; some deviations may be necessary.

Tentative Schedule

Date	Sections	Contents	Quizzes	Homework
M 8/18	§5.2	Anti-Derivatives		1-30(odd), 35–35(odd)
W 8/20	§5.3	Area Computation		19–29(odd), 33-49(odd)
F 8/22	§5.4	Riemann Sums		1–19(odd)
M 8/25	§5.4	Definite Integrals		43–53(odd)
W 8/27		Problem Session	Quiz 1	
F 8/29	§5.5	Evaluation of Integrals		1–35(odd)
M 9/1	§5.5	Evaluation of Integrals		37–53(odd)
W 9/3	§5.6	Fundamental Theorem		1–21(odd), 45–59(odd)
F 9/5	§5.7	Integration by Substitution		3–63(every 4th)
M 9/8		Problem Session	Quiz 2	
W 9/10	§5.8	Areas of Plane Regions		1–29(odd)
F 9/12	§5.8	Areas of Plane Regions(II)		31–45(odd)
M 9/15		Test I		
W 9/17	§6.1	Riemann Sum Approximation		1–17(odd)
F 9/19	§6.1	Riemann Sum Approximation		19–45(odd)
M 9/22	§6.2	Volums by Cross Sections		3–35(odd)
W 9/24		Problem Session	Quiz 3	
F 9/26	§6.3	Volums by Cylinderical Shell		1–27(odd)
M 9/29	§6.3	Volums by Cylinderical Shell		29–45(odd)
W 10/1	§6.5	Force and Work		1–15(odd), 16
F 10/3	§6.5	Force and Work		17–29(odd), 28
M 10/6		Problem Session	Quiz 4	
W 10/8	§6.7	The Natural Logarithm		1–31(odd)

F 10/10		Test II		
M 10/13	§6.8	Inverse Trigonometric Functions		1–29(odd)
W 10/15	§6.8	Inverse trigonometric Functions		31–55(odd)
F 10/17	§7.2	Integral Tables		3–49(odd)
M 10/20	§7.3	Integration by Parts		1–29(odd)
W 10/22	§7.3	Integration by Parts (II)		35, 37, 49–57(odd)
F 10/24		Problem Session	Quiz 5	
M 10/27	§7.4	Trigonometric Integrals		1–29(odd)
W 10/29	§7.4	Trigonometric Integrals		31–43(odd), 59,60,61
F 10/31		Fall Break		
M 11/3	§7.5	Rational Integrals		1–17(odd)
W 11/5	§7.5	Partial Fractions		19–35(odd)
F 11/7		Problem Session	Quiz 6	
M 11/10		Test III		
W 11/12	§7.6	Trigonometric Substitution		1–29(odd)
F 11/14	§7.7	Integrals involving Quadratics		1–29(odd)
M 11/17	§8.1	Simple Equations		5–15(odd), 19–39(odd)
W 11/19	§8.3	Separable Equations		1–19(odd)
F 11/21	§8.3	Separable Equations		21–39(odd)
M 11/24		Problem Session	Quiz 7	
W 11/26		Thanksgiving Holiday		
F 11/28		Thanksgiving Holiday		
M 12/1	§8.4	Linear ODE		1–19(odd)
W 12/3	§8.5	Population Models		1–19(odd)
F 12/5		Problem Session	Quiz 8	
M 12/8		Review for final		
F 12/12		Final Examination	12:00–3:00pm	

Grading Policy:

TEST I	100 points
TEST II	100 points
TEST III	100 points
Final Exam.	200 points
Quizzes	80 points
Total	580 points

Fixed Scale:

A	>= 90%
B	>= 80%
C	>= 65%
D	>= 50%
F	< 50%

MATH 1113 Syllabus (Call Numbers 11-744, 11-775), Fall 2003

Second Period (9:30--10:45am), TR, Room 322 Boyd GSRC
Third Period (11:00am--12:15pm), TR, Room 304 Boyd GSRC

Instructor

- Dr. Lingyun Ma, Department of Mathematics
  Office hours: 9:05--9:55am WF, 2:00--3:00pm TR or by appointment
  Office: 215A Barrow Hall
  Office Phone number: 542--7375
  Email address: *lyma@math.uga.edu*
  Web Site: www.math.uga.edu/~lyma/

Course Materials

- **PRECALCULUS,** UGA Edition, by David Cohen, available at the University Bookstore.
- **Lab Fee Card** is required to take tests. You can purchase it at UGA bookstore for $16.
- For more information about the course, please check Math 1113 Homepage. Its web address is *http://www.math.uga.edu/~~lb113/1113home.htm~~* /~john/new1113
- For tutorial sites on the campus and their operational hours, please check EITS Lab Sites Homepage. Its web address is *http://www.eits.uga.edu/sites*

Testing Labs:

- Room 324, Boyd GSRC
- **Lab Supervisor:** Sam Bennett, 325A Boyd GSRC, 542-0647

Attendance Policy

Students are allowed no more than 5 absences including both excused and unexcused absences. On the sixth absence a student may be withdrawn from the course with a grade of W or WF (definitely WF after midpoint). Do not regard these 5 allowed absences as "personal free days". These are only to be used in cases of illnesses or family emergencies. In some cases, verification may be required.

Grading Policy and Testing Dates:

Orientation	5%	
TEST I	Wednesday, Sept. 10	10% NO Calculator
TEST II	Tuesday, Sept. 23	10%
TEST III	Monday, Oct. 13	10%
Midpoint	Tuesday, Oct. 14	
TEST IV	Wednesday, Oct. 29	10%
TEST V	Tuesday, Nov. 18	10%
Reservations for Final	Nov. 17--Nov. 21	
TEST VI	Friday, Dec. 5	10% NO Calculator
Final Exam.	Dec. 10--Dec. 16	20% (3 hours)
In-class quizzes		15%

- There will be 6 quizzes given in class on the days that were marked by * in the following tentative schedule. The lowest quiz score will be dropped. The remaining quiz average will be counted as 15% of the course grade.
- If your final exam score is higher than your lowest long test score, then the lowest long test score will be replaced with the final exam score.
- Grading Scale

F < 60 < =D < 70 <= C < 80 <= B < 90 <= A

Tentative Schedule and Assignments ---- Fall 2003, Dr. Ma

Week	Mon.	Tuesday	Wed.	Thursday	Fri.
1. Aug. 18--22		Introduction Review		Def.& Graph of F. 4.1, 4.2	
2. Aug. 25--29		Shifts &Reflections 4.2, 4.3		Shifts &Reflections 4.2, 4.3	
3. Sept. 1--5	Labor Day	*Combining of F. 4.4		Review	
4. Sept. 8--12		Inverse F. 4.5	TEST I	Linear F. 5.1, 2.3	
5. Sept. 15--19		*Quad. F. 5.2, 3.1		Review, Geometry Formula	
6. Sept. 22--26		Setting up F. 2.1, 5.4 TEST II		Setting up F. 5.4	
7. Sept.29-Oct.3		Max-Min Prob. 5.5		Max-Min Prob. 5.5	
8. Oct.6--10		*Polynomials 5.6		Review	
9. Oct.13--17	TEST III	Exponential F. 6.1, 6.2 Midpoint		Log. F. 6.3, 6.4	
10. Oct. 20--24		* Log & Exp Eqn. Compound Interest 6.5, 6.6		Growth & Decay 6.7, Review	
11. Oct.27--31		Trig F. 7.1, 7.2	TEST IV	Fall Break	:)
12. Nov. 3--7		Right Triangle Applications 7.3		Other Angles & Radians 7.4, 8.1	
13. Nov.10--14		*App. of Radians 8.2, 8.3		Review, Graphs of Trig. 8.4	
14. Nov.17--21		Graphs of Trig. 8.5, 8.7 Add. Formulas 9.1,9.2 TEST V		Trig. Eqn. 9.4	
15. Nov. 24--28		*Inverse Trig. F. 9.5	:)	Thanksgiving Holidays	:)
16. Dec. 1--5		Review		Review	TEST VI
17. Dec. 8--12		Reading Day	Finals	Finals	Finals
18. Dec. 15-16	Finals	Finals			

Last Revised: Aug. 18, 2003

MATH 1101 Syllabus and Class Log
(Call Numbers 21-719, 01-721), Fall 2003

Instructor

- Dr. Lingyun Ma, Department of Mathematics
  Office hours: 9:05--9:55am WF, 2:00--3:00pm TR or by appointment
  Office: 215A Barrow Hall
  Office Phone number: 542--7375
  Email address: *lyma@math.uga.edu*
  Web Address: www.math.uga.edu/~lyma/

Class Meetings

- Third Period (10:10--11:00am), MWF, 328 Boyd GSRC
- Fourth Period (11:15am--12:05pm), MWF, 328 Boyd GSRC

Course Description

An introduction to mathematical modeling based on the use of elementary functions to describe and explore real-world data and phenomena. Graphical, numerical, symbolic and verbal approaches to the investigation of data, functions, equations, and models. Emphasis on applications and the ability to construct useful mathematical models, to analyze them critically, and to communicate quantitative concepts effectively.

This course is NOT meant to prepare students for Math 1113 (Precalculus).

Course Materials

- Text: *Elementary Mathematical Modeling,* Functions and Graphs, by Davis and Edwards, available at the University Bookstore.
- **Texas Instruments Graphing Calculator TI-82 or TI-83.** While `one can complete this course using a` **TI-85 or TI-86, This is not recommended. You cannot use a TI-81 for this course.**
- **Students are expected to have their calculators with them during each class.**

Course Web Site

- http://www.math.uga.edu/undergraduate/1101.html

Course Outline

- The course is divided into 4 components:
  - Chapter 1
  - Chapter 2
  - Chapter 3 and Section 4.1
  - Chapter 8

Each component will have an hour exam at the end. Students are required to have their calculators on the test day. **No make-up exams except for university approved activities, these must be scheduled in advance!** The lowest hour test score will be replaced by the final exam score if the final exam score is higher.

There will also be 5 short quizzes given in class on the days that were marked by * in the following schedule. Quiz questions will be similar (but not identical) to assigned homework problems from the text.

Students are expected to have their calculators with them during each class. **NO** make-up quiz will be given. At the end of the semester the lowest quiz grade will be dropped. The remaining quiz average will be counted as 15% of the course grade.

- Hour Tests
  - Sept. 12----Oct. 3----Nov. 5----Dec. 3
- Final Exam
  - 8:00-11:00am, Monday, Dec. 15, 2003 for 10:10am class
  - 12:00--3:00pm, Wednesday, Dec. 10, 2003 for 11:15am class.
- Grading Scale

  F < 60 < =D < 70 <= C < 80 <= B < 90 <= A

  15% Quizzes --- 15% Project ---50% Hour Tests ---20% Final Exam

- All students are responsible for maintaining the highest standards of honesty and integrity in every phase of their academic careers. The penalties for academic dishonesty are severe and ignorance is not an acceptable defense. For more information, please check the website http://www.uga.edu/ovpi/academic_honesty/culture_honesty.htm , particularly sections 5 and 7.
- The course syllabus provides a general plan for the course; deviations may be necessary.

Tentative Schedule and Class Log for Math 1101 ---- Fall 2003, Dr. Ma

Week	Mon.	Tues.	Wed.	Thurs.	Fri.
1. Aug. 18--22	Introduction		Section 1.1		Section 1.2
2. Aug. 25--29	Section 1.2		Section 1.3		*Section 1.3
3. Sept. 1--5	Labor Day Holiday		Section 1.3		Section 1.4
4. Sept. 8--12	Section 1.4		Review		TEST I
5. Sept. 15--19	Section 2.1		Section 2.1		Section 2.2
6. Sept. 22--26	Section 2.2		*Section 2.2		Section 2.3
7. Sept.29--Oct.3	Section 2.3		Review		TEST II
8. Oct. 6--10	Section 3.1		Section 3.1		Section 3.2
9. Oct. 13--17	Section 3.3	Midpoint	*Section 3.3		Section 3.3
10. Oct. 20--24	Section 3.4		Section 3.4		Section 4.1
11. Oct. 27--31	Section 4.1		*Section 4.1	Fall	Break
12. Nov. 3--7	Review		TEST III		Section 8.1
13. Nov. 10--14	Section 8.1		Section 8.2		Section 8.2
14. Nov. 17--21	Section 8.2		*Section 8.3		Section 8.3
15. Nov. 24--28	Section 8.3		Thanksgiving		Break
16. Dec. 1--5	Review		TEST IV		Review
17. Dec. 8--12	Review	Reading Day	Final Exam 12-3pm for 11:15am class		
18. Dec. 15--19	Final Exam 8--11am for 10:10am class				

Last Revised: Aug. 18, 2003