

Course: MATH 1113F  
Precalculus Mathematics

Instructor: Dr. John C. Sligar  
Office: Allgood Hall N332  
Office Hours: 1:30-2:30 PM MWF  
10-11 AM TR  
Phone No.: (706)667-4486

Textbook and required materials: Swokowski, Cole "Precalculus, Functions and Graphs, Tenth Edition". (ASU Custom Edition)  
Scientific Graphing Calculator (TI-83 or TI-84 required)

Catalog Course Description: A study of functions including polynomial, exponential, logarithmic, and trigonometric functions.

Course Format: The lecture-demonstration method will be the method most often employed. I will use a graphing calculator for demonstration very often in class, therefore please bring your calculator to class with you every class day. I will require you to use your calculator on tests.

Methods of evaluation: The majority of the grade in the course will come from four major examinations, four short quizzes and a final. The schedule of exams and quizzes is attached.

Grading formula:

4 major exams	50%
4 short quizzes	20%
1 final exam	30%

The lowest major exam grade and the lowest quiz grade will be dropped.

Attendance: You are expected at all classes, review sessions, quizzes, and examinations. Attendance will be taken on a daily basis starting after the drop-add period. Lack of attendance will not necessarily lead to withdrawal. The main purpose of taking attendance is to facilitate the proper reporting of the last date of attendance on students who have stopped attending and are receiving Title IV funds. However, the registrar has asked instructors to be vigilant of attendance, as prompt attendance is often a requirement in certain financial aid situations. Therefore, repeated and unexplained absence **may** lead to withdrawal. I reserve the right to administratively withdraw any student for excessive absence. Do not assume, however that I will automatically withdraw you for lack of attendance. If it is your desire to withdraw, **you** must initiate the withdrawal. Only in special circumstances may a student receive a grade of W after midterm. Please consult your student manual for these criteria. Otherwise a student withdrawing after the midpoint of the semester will receive a grade of WF. It is your responsibility to be present for all exams and quizzes. No makeups will be given. If you feel that you have an exceptional case, I will be willing to discuss it with you. However, I claim no unilateral policy, nor do I make any guarantees, either expressly or implied, concerning the giving of a makeup. Any student missing the Final Exam will automatically be assigned a grade of WF in the course.

Study suggestions: In order to succeed in this course you **must** regularly do your homework. Read your textbook. You cannot possibly hope to succeed if you do not know the basic definitions and theorems. Be prepared to take good notes, and regularly compare these notes to the material in the textbook. If you find

any apparent contradictions, seek to resolve them with me. The main point is for you to learn and understand, so ask questions whenever you have the opportunity. I will always be willing to stop and answer your questions.

Additional Information: The administration has asked all instructors to stress the importance of the building rules in Allgood Hall and University Hall. This includes no food or drink in the classrooms, no students gathering in classrooms except during class times, etc. Consult public safety if you want to receive a formal copy of the building rules. I as an instructor expect you to abide by these rules.

As a matter of courtesy, please turn off or sound-disable any cell-phones, blackberries, blue-tooths, etc.,etc.etc. (in general any device whatsoever that is capable of making NOISE) during class. None of the aforementioned technologies are allowed during exams. The only device that will be allowed during exams will be your calculator.

Furthermore, as a matter of courtesy, only get up and leave the classroom during class if you have a pressing need. If you must leave early or come in late, try to sit near the door, and let me know in advance if possible.

## Math 1113 Suggested Homework Problems

\*Optional topics have asterisks, **Bold** Groupings Corresponding to  $\approx$  Fifths of Semester

### Functions, Polynomials, Graphs, and Transformations

Sections	Topics	Pages and Suggested Problems
2.4, 4.1	Functions and Inverses	p. 150 – 155: 1 – 77 odd, 85, 87 p. 288 - 290 : 1, 3, 7, 9, 19, 29, 43, 45, 47
2.5	Graphs, Transformations	p. 169 – 171: 1 – 53 odd, 63, *worksheet
3.1	Polynomial Functions	p. 215 – 219: 1 – 55 odd, 48
3.2	Properties of Division	p. 225 - 227: 1 – 51 odd, 50
3.3	Zeroes of Polynomials	p. 237 – 239: 1 – 57 odd
3.4	Complex, Rational zeroes	p. 247 – 249: 1 – 41 odd
*3.5	Rational Functions	p. 264 – 265: 3, 11, 37, 51
[	*Chapter 3 Review	p. 275 – 277: 1 – 28, 43 – 46]

### Advanced Exponentials, Logarithms, and Applications

4.2, 4.3	Exponentials, Natural Exponentials	p. 299 – 304: 1 – 45 odd, 63, 65 p. 311 – 314: 1 – 41 odd 51, 53
4.4	Logarithmic Functions	p.325 – 330: 1 – 73 odd, 77, 79
4.5	Properties of Logarithms	p 336 – 337: 1 – 45 odd, 53, 59, 63, 69
4.6	Exponential and Log Equations	p. 348 – 351: 1 – 59 odd p. 352 – 355: 1 – 64]
[	*Chapter 4 Review	

### Trigonometric Functions

5.1	Angles	p. 369 – 371: 1 – 53 odd
5.2	Trig Functions of Angles	p. 385 – 389: 1 – 91 odd
5.3	Trig Functions of Real numbers	p. 404 – 407: 1 – 31 odd, 69, 71
5.4	Values of Trig Functions	p. 414 – 415: 1 – 23 odd, 25, 37, 39, 41, 43
5.7	Applied Problems	p. 446 – 452: 1 – 35 odd, 34 p. 452 – 459: 1 – 29, 57, 58, 61, 62 ]
[	*Chapter 5 Review	

### Graphs, Applied Trigonometry, and Identities

5.5	Trigonometric Graphs	p. 426 – 430: 1 – 55 odd, 63, *worksheet
5.6	Additional Trig Graphs	p. 437 – 439: 1 – 65 odd, 70
5.7	Applied Problems	p. 446 – 452: 37 – 57 odd, 65, 73
6.6	Inverse Trig Functions	p. 521 – 525: 1 – 77 odd p. 452 – 459: 30 – 56, 59, 60, 63 - 79]
[	*Chapter 5 Review	
6.1	Identities	p. 466 – 468: 1 – 60, 61 – 75 odd p. 525: 1 – 5, 59 – 67, 71 – 73 ]
[	*Chapter 6 Review	

### Analytic Trigonometry, Laws of Sines and Cosines

6.2	Trigonometric Equations	p. 479 – 482: 1 – 69 odd, 81, 83, 87, 89, 97
6.3	Angle Addition/Subtraction	p. 490 – 494: 1 – 51 odd, 55, 67, 69, 71
6.4	Multiple Angle Formulas	p. 500 – 503: 1 – 45, 47, 49
6.5	Product $\rightarrow$ Sum, Sum $\rightarrow$ Product	p. 508 – 509: 1 – 36, 39, 41 p. 525 – 528: 6 – 58, 69, 70, 78, 79 ]
[	*Chapter 6 Review	
7.1	Law of Sines	p. 537 – 540: 1 – 30
7.2	Law of Cosines	p. 546 – 550: 1 – 35

\*Selected Review Topics for Calculus (time permitting but not recommended for more than one lesson) Algebraic Expressions S1.3 page 46: 55, 59, 67, 71, Equations S1.4 page 63 – 65: 69, 71, 83  
Inequalities S1.6 page 86: 35, 43, 51, 52, 55 Lines S2.3: 54, 55, 59

Pages and sections correspond to the 10<sup>th</sup> edition of *Precalculus, Functions and Graphs*, Swokowski/Cole

Course: **MATH 1113F**

Instructor: **SLIGAR**

Rm/Days/Time: **UH 246/TR/1130-1245**

## FALL 2009

<b>M</b>	<b>T</b>	<b>W</b>	<b>R</b>	<b>F</b>
Aug 17 <b>Classes begin</b>	18	19	20	21
24	25	26	27 <b>Quiz 1</b>	28
31	Sep 1	2	3 <b>Exam 1</b>	4
7 <b>Labor Day Holiday</b>	8 <b>Student Holiday</b>	9	10	11
14	15	16	17	18
21	22	23	24 <b>Quiz 2</b>	25
28	29	30	Oct 1 <b>Exam 2</b>	2
5	6	7	8	9
12 <b>Midpoint</b>	13	14	15	16
19	20	21	22 <b>Quiz 3</b>	23
26	27	28	29 <b>Exam 3</b>	30
Nov 2	3	4	5	6
9	10	11	12	13
16	17	18	19 <b>Quiz 4</b>	20
23	24	25 <b>Holiday</b>	26 <b>Holiday</b>	27 <b>Holiday</b>
30	Dec 1 <b>Exam 4</b>	2	3 <b>Classes end</b>	4
7 <b>Exams</b>	8 <b>Exams</b>	9 <b>Exams</b>	10 <b>Exams</b>	11
14 <b>Grades viewable</b>	15	16	17	18

**Final Exam Date/Time: Tuesday, December 8, 1-3 PM**