

Mathematics 115-101

When and Where:

MWF 11:15AM –12:05 PM, ILB 140; Thursday 11:15AM-12:05PM ILB 370. *Note the change of place on Thursday!*

Text: Faires, J. Douglas and DeFranza, James *Precalculus*, Fourth Edition (2007, Belmont, CA), Thomson Brooks-Cole Publishing, ISBN 0-495-01269.

Instructor: Prof. Scott Carter, ILB 304, 460-6264, x66756, e-mail: carter@jaguar1.usouthal.edu

Office Hours: Tuesday 10:00AM-12:00PM, Thursday 10AM -11:05 AM, or by appointment. You are encouraged to come to office hours to ask about the course and to get acquainted.

Grading Policies: There are two components to your grade.

Necessary Criteria: You need to complete all on-line homework problems assigned below with your average score being at the level of 80% or above. You may do each assignment as many times as necessary, but each assignment is to be completed on or before the due date.

There are exceptional students who can learn mathematics by watching others do it. Most of us have to work the problems ourselves.

Sufficient Criteria: There will be a weekly written quiz that covers the homework assignments. These are the written versions of the problems that you will do on-line. Each quiz will count 10 points.

Tests: There will be 2 tests, Thursday September 25 and Thursday November 6. Each counts 100 points. According to my reading of

<http://www.southalabama.edu/registrar/dates.htm>

The final is scheduled from 10:30 AM – 12:30 PM on Monday December 8. The final counts 150 points.

If you have a *good excuse* for not making it to one of the exams, then your final exam will count as if it were 250 points. However, lenience in grading policy will only be granted if you ask, and the final determination if it is warranted is up to me. As a result there will be **no make up exams or quizzes**.

Scoring: There are more than 450 points available. I think the total number of available points is 490. If you score over 405 your grade will be an *A*, if you score over 360 you will earn no lower than a *B*. Realistically, I graph the total number of points earned for all students sorted from least to greatest, and divide the grades according to the most reasonable large gap in scores. I will illustrate this technique on the first day of class.

Absences: Habitually absent students lose privileges: *E.g.* office hours, sensitive answers to in class questions, and grading appeals. The syllabus is subject to change and clarification. Therefore, class attendance is important.

If you do not understand an explanation on Monday, it may be the case that clarification is given on Wednesday.

Goals for the Course: The successful student in Math 115 should be prepared for calculus with a working knowledge of certain families of functions, solving equations that contain such functions, and the geometric representations of their graphs. Specifically, students should be able to solve rational inequalities, graph lines and quadratic functions, understand the elements of polynomial

functions, trigonometry from the view point of circles and triangles, exponential and logarithms, quadratic expressions in two variables, and elements of parametric curves. The observant student will notice that the narrative above essentially articulates the chapter and section titles in the book.

Other Remarks:

1. **Calculators:** You may use a calculator for your homework, but there are only a few quizzes for which the calculator is allowed. Sometimes it is an essential tool, more often it is a cumbersome burden.
2. **Blue books** On or before Sept 2, supply me with 3 large blank blue books. Do not write your name on the blue books! These will be used for tests and the final.
3. **Special Students** If you have a specific disability that qualifies you for academic accommodations, please notify me and provide certification from the Office of Special Student Services.
4. **Departmental tutoring** Free tutoring is available for elementary course from the Department of Mathematics and Statistics. Please check the bulletin board outside ILB 325 for details.
5. **Disclaimer** I have the right and the duty to modify the requirements of the course as circumstances dictate. Such changes will be provided to the students in class and in writing. This is another reason that attendance is mandatory.
6. **Dropping** The final drop date is October 24 at 4:59 PM. Please speak to me if you are getting behind. Also talk to me before making a final decision to drop.

Course Outline

Date	Section	Homework
Mon Aug 18	1.1-1.2	# 1,3,5,13,15,19,23,27
Wed Aug 20	1.2	# 31,34,37,41,49,51,54,59,65,66
Thur Aug 21	1.3	# 3,6,9,12,15,17,19,22,26,30,33
Fri Aug 22	1.3	# 36,38,41,43,46,49,56,59
Mon Aug 25	1.4	# 1,2,3,4,6,7,9,12,13,21,26, 28,29,30,32,33,36,37,39,43, 44
Wed Aug 27	1.6	# 1,2,6,12,15,19,22,27,34,37,42,57,60,62,66,68
Thur Aug 29	1.7	# 1,4,9,14,16,17,19,20,23,27,31,32,34
Fri Aug 29	1.8	# 2,5,7,10,14,17,20,21,23,26
Wed Sept 3	1.8	#29,30,31,33,35,38,40
Thur Sept 4	1	p. 74
Fri Sept 5	2.2	# 1, 4,6,7,9,11,14,16,17,19,23,26,33,38
Mon Sept 8	2.3	#1,3,5,7,9,12,16,17,18,19,21
Wed Sept 10	2.4	#1,4,8,10,11,14,15,17,20,23,24,35,37
Thur Sept 11	2.5	# 1,3,4,6,7,8,11,13,15,16,19
Fri Sept 12	2.5	# 21,23,24,26,28,35,37,40
Mon Sept 15	2	p. 118
Wed Sept 17	3.2	# 1,3,4,7,10,11,12,13,16,18,23,25,31,33,47
Thur Sept 18	3.3	# 1,4,6,7,10,12,15,17,19,20,22,23,29,31,34,36,37
Fri Sept 19	3.4	# 1,3,4,8,10,11,12,13,15,17,19,21
Mon Sept 22	3.4	# 23,28,31,32,36,38,42,43,46,47
Wed Sept 24	3.5	# 1,3,4,5,8,10,11,13,16,18
Thur Sept 25	Review	Review
Fri Sept 26	TEST	TEST

Date	Section	Homework
Mon Sept 29	3.5	# 20,21,25,27,29,31
Wed Oct 1	3	p. 183
Thur Oct 2	4.2	# 6,8,10,12,14,15,20,22,26,30,31,33,37,40,41
Fri Oct 3	4.3	# 3,7,9,13,18,33,35,39,40,43,44,48,52,53
Mon Oct 6	4.4	# 1,4,5,8,11,13,19,23,26,35,41
Wed Oct 8	4.4	# 2,6,7,12,14,15,16,17
Thur Oct 9	4.5	# 4,9,12,21,23,32,35
Fri Oct 10	4.6	# 1,3,9,14,17,20,23,26,27,31,35,39,41,44,46
Mon Oct 13	handout	handout
Wed Oct 15	4.7	#1,3,4,5,7,8,11,13,15,16,19,25,26
Thur Oct 16	4.8	# 1,2,3,5,6,7,8,11,15,16,19,20
Fri Oct 17	4.8	# 23,24,27,28,31,32,45
Mon Oct 20	4.9	# 1,4,5,7,8,9,11,14,17,18,20,23,26
Wed Oct 22	4	p. 265
Thur Oct 23	5.2	#1,5,8,9,12,13,15,16,17,19
Fri Oct 24	5.2	# 21,22,25,27,31,35,37,38,46
Mon Oct 27	5.3	# 1,6,9,11,13,15,17,20,21,24,27
Wed Oct 29	5.3	# 29,31,35,42,51,56,59,62,65,69
Thur Oct 30	5.4	# 1,3,4,5,7,8,9
Fri Oct 31	5.4	# 10,12,13,15,16,18
Mon Nov 3	5	p. 306
Wed Nov 5	Review	Review
Thur Nov 6	TEST	TEST

Date	Section	Homework
Fri Nov 7	6.2	# 2,4,11,13,16,19,21,23,25,27,31,33,35,37
Mon Nov 10	6.3	# 4,6,9,12,13,15,17,18,21,24,26,28,29,34
Wed Nov 12	6.4	# 1,7,11,14,15,19,22,23,25,28
Thur Nov 13	6.5	# 1,4,8,12,14,17,21,23,25,26,27,29,31
Fri Nov 14	6.5	# 32,33,35,38,42,44,47,53,56,65,67
Mon Nov 17	6.7	#1,2,3,4,5,6,7,8,10,11,12,17,21,22,23,25
Wed Nov 19	Binomial	Binomial
Thur Nov 20	Complex	Complex
Fri Nov 21	6	p. 363
Mon Nov 24	Review	Review
Mon Dec 1	Review	Review