Syllabus - Math 107 Section 3 Fall 2017

Instructor: Elizabeth J. Dempster

Email: ejdempst@ncsu.edu Office: SAS 3240

Office hours: Monday: 10:30-11:30 am

Friday: 10:30-11:30 am and 12:30-1:30pm

Course Content & Goal: Algebra and basic trigonometry; polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs. The course content is designed as a Precalculus course for Math 131:Calculus for Life and Mananagement Sciences or Math 121: Calculus for Business.

Textbook: Precalculus: Algebra and Trigonometry; 1st Edition by Burns-Williams; The book is delivered through WebAssign. Students will pay for the pdf version of the book and the homework assignments in one sum at the beginning of the semester through the WebAssign site for the course; http://webassign.ncsu.edu The course content of the book is also on Moodle once the semester starts. The moodle site is where the interactive features of the book are found and where you'll mainly work.

Other Reference Materials:

I'll reference and use a FREE online book Openstax (from Rice University) https://openstax.org/subjects/math and many of my old textbooks on my shelves. You may also want to use your high school textbooks or check out Precalculus textbooks from the library.

Course Grade Components and Percentages

Module Pretests and Try-its	5%
Webassign Homeworks	5%
4 tests (15% each)	60%
Final Exam	30%

Dates of the Four In Class Tests and the Final exam-

Policy: No graphing calculators are allowed on tests or exam

Test 1(Modules 1-6)	Wednesday, September 13
Test 2 (Modules 7-11)	Wednesday, October 11
Test 3 (Modules 12-15)	Wednesday, November 1
Test 4 (Modules 16,17 and 18)	Monday, November 20
Exam : Wednesday, Dec 13th	1-4pm Daniels 322

Please note these dates now! You can only change an exam if you have three within 24 hours and approval through the registrations office and the math department. This must be done early so we can get approval so please check your exam schedule NOW. Travel plans for leaving must be made according to your exam schedule so if you are purchasing plane tickets or making other arrangements for travel, make sure you check the official time of your exams. Here is the link to the NCSU official exam schedule (Fall '17) so you can check all your classes by the times they meet

https://studentservices.ncsu.edu/calendars/exam/#fall

Make Up Test Policy: If you miss a regular test and qualify to take a make up, that make up test will be given during the *last week of classes* or you can opt to let your exam score replace the test score BUT you must meet the following requirements to qualify for taking a make up. I follow the University policy (http://www.ncsu.edu/policies/academic_affairs) that all anticipated absences must be excused in advance of the test date; these include University duties or trips certified by appropriate faculty or staff member. Emergency absences must be reported within one week of the event and can be documented by the Parent and Family Services (515-2441). Make-ups for oversleeping, car trouble, sickness can only be given on the day of the test so email or have someone email or call for you!

Getting help: Students must take responsibility for their own learning and seek help when needed. The instructor and lecture assistants all hold office hours but there is also a math help room in Sas 2105; the Multi-media Center has tutoring on a drop in basis Mon-Friday 8am-5pm http://www.math.ncsu.edu/mmc There is also help available through the Undergraduate Tutorial Services http://www.ncsu.edu/tutorial_center

Students with Disabilities: Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 515-7653 http://www.ncsu.edu/dso/ For more information on NCSU's policy, see Academic Accommodations for Students with Disabilities Regulation.

Code of Student Conduct will be upheld. Documentation will be submitted to the Office of Student Conduce for students who violate University regulations on academic integrity. http://www2.ncsu.edu/ncsu/stud_affairs/policies/code95.html

Blue Books: Each student is to turn in 5 blank blue books(small ones are standard) by Friday, September 9th. DO NOT WRITE ANYWHERE ON THEM! Please give them to a lecture assistant and have them check off your name. Getting this done on or before Monday, September 11th will earn you 2 points extra credit on the first test. Please give them to the teaching assistants and have them mark off your name. Thank you!

Attendance: In accordance to university policy, we must take and record your attendance. To start with, I'll take attendance each day. There is *no difference between excused and unexcused absences*; 3 or fewer is considered "perfect" so do not use up these 3 "free" absences. There will be extra credit points given for missing 3 or fewer classes added onto your webassign average.

Day by Day Schedule

Day by Day Schedule					
Date	Day	Text	Topic		
Aug 16	Wed		Into to course; Supplement – Lines		
			Start Module 1 : Functions, domain and range		
Aug 21	Mon	*Mod 1	Functions ; domain, range, difference quotient		
		*Mod 2	Algebra of functions		
	Wed	*Mod 3	Graphs of Functions;		
			Go over modules 1-3		
Aug28	Mon	*Mod 4	Piecewise defined functions		
	Wed	*Mod 5	Graphing by Translations		
Sep 4	Mon		Labor Day – no classes		
	Wed	*Mod 6	Writing Functions for modeling		
Sep11	Mon		Review Modules 1-6		
Sep 13	Wed		Test #1 – Modules 1-6		
Sep 18	Mon	*Mod 7	Quadratic Functions		
	Wed	*Mod 8	Polynomials		
Sep 25	Mon	*Mod 9	Rational Functions; domains and vertical asymptotes		
	Wed	Mod 9 &10	Continue Rational functions; long term behavior; horizontal asymptotes; slant asymptotes		
			Start module 10 Composition of functions		
Oct2	Mon	*Mod 10	Composing Functions		
	Wed	*Mod 11	Inverse Functions		
	Fri		Fall Break		
Oct 9	Mon		Review		
	Wed		Test #2 Modules 7-11		
Oct 16	Mon	*Mod12	Module 12 – Exponential Functions		
	ı		l .		

	Wed	*Mod13	Module 13 – Logarithms
Oct 23	Mon	*Mod14	Using Exponential Functions; start Logarithmic functions
	Wed	*Mod15	Logarithmic functions
Oct 30	Mon		Review
Nov 1	Wed		Test #3 Modules 11-15
Nov 6	Mon	*Mod16	Modeling with Exponential and Logarithmic functions
	Wed	*Mod17	Angles and Arcs
Nov 13	Mon	*Mod18	Right triangle Trigonometry
	Wed		Module 18
Nov 20	Mon		Test #4 Module 16 -18
22	Wed		Break for Thanksgiving
Nov 27	Mon		Supplement – regions between graphs
	Wed		Review

Description of how to work on Math 107 materials

The Moodle site houses the interactive text book for our course; moodle has the pretest and the try it quizzes.

The Webassign site has the online homework for each module and the pdf of the text.

You will earn a "module score" for your work within the text book on moodle(pretest and try its)

You will earn a "webassign average" for the online homework sets on Webassign.

On your syllabus, you see there are day by day goals.

The flow chart for your work is as follows:

- **1. Do the "Pretest" quizzes** before a topic is taught (or learned) to see how much you remember or know about the objectives in the particular module.
- 2. Start to learn the objectives in the module by coming to class lecture, watching the videos in moodle, doing the examples that are in the module, going to the help room, visiting office hours ,...
- **3. Do the "try it" quizzes** once you think you know the objective well enough to try. These are due in blocks before each test. All of these are on the moodle page. For each point you miss on a pretest, you will want to get one try it quiz correct to earn that point back. You can do more try its quizzes for more points but the overall percentage for each module is capped at 100%.
- **4. Do homework that is in the Webassign for each module** (due dates on webassign, usually a few days <u>after</u> the lecture on the module)
- **5. Go back over** problems you've worked and do them from scratch. There will be review supplements posted with extra problems too. These will be on our moodle site.

Math 107 is a "blended" course – it has both an online component and an in class lecture component. To get the most out of the class, you must be actively involved. "Actively involved" means taking the pretest before the lectures, coming to class ready to listen and ask questions, going back over materials as needed for your learning. The videos on the moodle site are an excellent resource, please watch these and try doing the problems. There are lots of resources for help. My and the t.a.'s office hours, the math help room, the undergraduate tutorial center are excellent places to go for help. Work with your friends on the material – make friends in the class so you have people to study with – one of the best reasons to come to class is to meet your peers taking the class with you! To summarize, I want you engaged and working during and after class. Please turn off your cell phone and your computer during lecture so you can be actively involved in the material of the day. I hope this will be a great class for you and you will achieve the goal you have set out for yourself for this course.

Best wishes for a great semester!

Ms. Elizabeth Dempster