Lamar University
Department of Mathematics

MATH 2311-02 (3 hour course) Precalculus I
Fall 2014 Syllabus
Mondays and Wednesdays, 3:50pm-5:10pm, Lucas 118

Instructor: Freddie Titus
Office: CDS 105
Phone: 409-880-8918
Office Hours: Immediately after class, M/W 5:10-6:10, or by appointment in CDS 105

Text: Precalculus for Lamar University by Sullivan, Required
Blackboard will be used only for document storage and email

Prerequisites: 350 Math TSI, TSI Complete, or TSI Exempt. Prepares for: MATH 1316, 1325, 1342, 2312, 2376, 3312, 3313. Offered: Fall, Spring, Summer

Catalog Description: In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations.

MATH 2311 Learning Outcomes: Upon successful completion of this course, students will:
1. Demonstrate understanding and knowledge of properties of functions, which include domain and range, operations, compositions, and inverses.
2. Delineate and apply polynomial, rational, radical, exponential, and logarithmic functions and solve related equations and application problems.
3. Apply graphing techniques.
4. Evaluate all roots of higher degree polynomials and rational functions.
5. Describe and solve systems of equations and solve application problems.
6. Demonstrate facility with algebraic manipulations.

Core Curriculum Outcomes: Upon completion of this course, the student will demonstrate his or her abilities to think critically, communicate quantitative information, and apply mathematical concepts:
1. Critical Thinking: Develop a logical, consistent plan to solve a problem, recognize consequences of the solution, and articulate a reason for choosing solution method.
2. Communication Skills: Use and present quantitative information in connection with an argument or problem solution and explicate it in an effective format.
3. Empirical and Quantitative: Construct and present a detailed problem statement with evidence of relevant contextual factors and possible approaches for solving the problem, then implement a solution and review the results.
Lectures/Discussions/Classwork/Homework Topics:
Text sections will be completed in the following order.
1. Linear Equations
2. Quadratic Equations
3. Radical Equations; Equations Quadratic in Form; Factorable Equations
4. Systems of Linear Equations
5. Systems of Nonlinear Equations
6. Solving Inequalities
7. Equations and Inequalities Involving Absolute Value
8. Graphs
9. Distance and Midpoint Formulas
10. Graphs of Equations in Two Variables; Intercepts; Symmetry
11. Lines
12. Circles
13. Functions and Their Graphs
14. Transformations
15. Mathematical Models
16. Linear Functions and Their Properties
17. Quadratic Functions and Their Properties
18. Inequalities Involving Quadratic Functions
19. Polynomial and Rational Functions
20. Polynomial and Rational Inequalities
21. Exponential and Logarithmic Functions
22. Composite Functions
23. One-to-One Functions; Inverse Functions
24. Logarithmic and Exponential Equations
25. Logarithmic and Exponential Equations

Major Course Components: There will be three tests and a final exam: Test 1-Sections 1-8, Test 2-Sections 9-17, Test 3-Sections 18-25. Tests dates will be announced at least one week in advance. Assignments will be completed on the WebAssign site.

Grading Policies: Students are expected to be in class on time and to stay for the entire class period. Students are warned that excessive absences are not conducive to achievement. There will be three tests and a final exam, each of which will provide 20% of the final grade. Tests will be announced one week in advance. Homework completed using WebAssign will provide the other 20%. Homework will be announced on the WebAssign site. WebAssign will close each assignment at the time and date indicated for each assignment and none will be reopened for late submission. Makeup quizzes and/or tests will be allowed, but must be scheduled in advance and completed within one week of the originally testing date. Final grades will be provided on Banner and will be based on the following scale: A-94%, B-85%, C-70%, F-below 70%

Attendance Policy: While roll may not be taken every class period, it is important for you to understand the value of class attendance and accept the personal responsibility involved. You are expected to be in class on time and stay for the entire period. Your final grade will be negatively affected if you miss class. As mentioned in the section above, late work will not be accepted.

Final Exam: The final exam is mandatory and will take place 2:00pm-4:30pm on Monday, December 8, 2014.

While I have made a sincere effort to ensure that this syllabus is correct, changes may be required. I will announce any substantive changes during a regularly scheduled class. If you find an error or omission, please advise me at once so that the other members of the class may be advised.
Important Information for Students

Lamar University expressly prohibits intimidation and harassment of students, faculty, staff, or applicants.  [http://dept.lamar.edu/studentaffairs/handbook.htm]

**Drop Policy:**  Please make note of the three dates indicated in this drop policy. Any drop will be your responsibility; I will not drop a student from the course.

**September 10, 2014:** (Census Date-Six Drop Rule does not apply) A student may drop or withdraw without consulting with the instructor. The Six Drop Rule does not apply to a drop before 5:00 PM.

**September 29, 2014:** (Six Drop Rule applies) A student may drop or withdraw from the course without academic penalty and receive a Q, however, the Six Drop Rule applies. The student will consult with the instructor and the Records Office to initiate a drop.

**November 3, 2014:** (Six Drop Rule applies) Last day to drop or withdraw with academic penalty; the student must be passing the course at the time of the requested drop in order to receive a Q. The drop form, including all required signatures, must arrive in the Records Office by no later than 4:00 PM. No drop is allowed after this date except in extreme extenuating circumstances. Any “late drop” must be approved by the instructor, department chair, college dean, and provost.

**Academic Integrity:** Students are expected to maintain complete honesty and integrity in their academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. Students are specifically warned against all forms of cheating and plagiarism. The *Lamar University Student Handbook* clearly reads: “Any student found guilty of academic dishonesty in any phase of academic work will be subjected to disciplinary action. Punishable offenses include, but are not limited to, cheating on an examination or academic work which is to be submitted, plagiarism, collusion, and the abuse of source materials.” One aspect of the *Handbook’s* definition of cheating includes “purchasing or otherwise acquiring and submitting as one’s own work any research paper or other writing assignment prepared by an individual or firm.” Plagiarism is defined as “the appropriation and the unacknowledged incorporation of another’s work or ideas into one’s own and submitted for credit.” Faculty members in the College of arts and Sciences investigate all cases of suspected plagiarism. Any student who is found cheating in this course will receive a course grade of F.  [http://dept.lamar.edu/studentaffairs/handbook.htm]

**Accommodations:** Lamar University is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center (DRC) is located in the Communications building room 105. Office staff collaborate with students who have disabilities to provide and/or arrange reasonable accommodations. If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact the DRC at 409-880-8347 or drc@lamar.edu to arrange a confidential appointment with the Director of the DRC to explore possible options regarding equitable access and reasonable accommodations. If you are registered with DRC and have a current letter requesting reasonable accommodations, we encourage you to contact your instructor early in the semester to review how the accommodations will be applied in the course.

**Campus Closure:** In the event of an announced campus closure in excess of four days due to a hurricane or other disaster, students are expected to login to Lamar University’s website’s homepage (www.lamar.edu) for instructions about continuing courses remotely.

**Emergency Procedures:** Many types of emergencies can occur on campus; instructions for severe weather or violence/active shooter, fire, or chemical release can be found at: [http://www.lamar.edu/about-lu/administration/risk-management/index.html]
Following are procedures for the first two:

**Severe Weather:**

- Follow the directions of the instructor or emergency personnel.
- Seek shelter in an interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside.
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building.
- Stay in the center of the room, away from exterior walls, windows, and doors.

**Violence/Active Shooter:**

- **CALL** - 8-3-1-1 from a campus phone (880-8311 from a cell phone). Note: Calling 9-1-1 from either a campus phone or cell phone will contact Beaumont City Police Dispatch rather than University Police.
- **AVOID** - If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.
- **DENY** - Barricade the door with desks, chairs, bookcases or any other items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it is safe.
- **DEFEND** - Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.

**Course Evaluations:** You will have an opportunity to evaluate all aspects of this course in a formal process to be completed online near the end of the term. You will receive an email reminder through your LU account.