

SYLLABUS FOR LECTURE VERSION OF MATH 1900 – PRECALCULUS

INSTRUCTOR: Mrs. Beverly J. Pepe

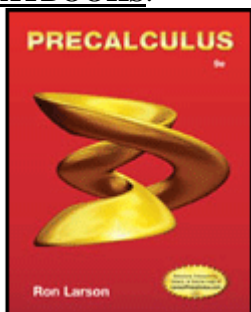
OFFICE: Room 3087 Knight Campus

PHONE NUMBER: 825-2467 (my office)
825-2175 (Mrs. Morse our Secretary)

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OFFICE HOURS: M: 9 & 10; T: 11; W: 11; Th: 8 & 11;
(*Additional hours may be available by appointment or by dropping in*)

TEXTBOOKS:



1. Precalculus, 9th edition by Larson & Hostetler, Houghton Mifflin Publisher (Visit www.cengagebrain.com for various purchase and rental options available for this textbook and for information about acquiring your one-week free access to the e-book while your book ships.)
You can check for the current ISBN for this textbook on the CCRI Bookstore website

2. (Optional) Student's Solution Manual

Suggested: a loose-leaf binder to hold handouts and completed homework assignments

Course Description

Functions and their graphs are discussed with particular attention paid to polynomial, rational, trigonometric, exponential, and logarithmic functions. Determinants, matrices, complex numbers and analytic geometry are also studied.

Course Objectives

To prepare the students to enter and be successful in the calculus courses.

Learning Outcomes

1. Know and use the complex numbers to solve and obtain all solutions of quadratic functions, and those that are reducible to quadratic.
2. Evaluate functions, including piecewise functions, determine their composition, domain/range, symmetry; determine distance between two points; solve systems of equations by graphing.
3. Find the zeros by synthetic division, vertex, intercepts of functions, union and intersection of sets, solve polynomial and rational inequalities.
4. Find the inverse of a relation, graph exponential functions, graph logarithmic functions, use the properties of logarithms to solve logarithmic equations, common and natural logarithms.
5. Find trigonometric function values using radian measure, graph sine, cosine, and tangent functions and their transformations.
6. Solve trigonometric equations, use the sum, difference, double and half angle identities, and prove trigonometric identities.
7. Find the sum, difference of vectors, plot and graph polar equations, complex numbers in the form $a + bi$, use DeMoivre's Theorem to raise a complex number to a power, and find the n^{th} root of a complex number.
8. Solve systems of two and three variable equations by the methods of graphing, substitution, elimination, and by using Cramer's Rule, find determinants using matrices.
9. Define a conic section and graph the parabola, circle, ellipse, and hyperbola, and find all pertinent information of each; solve systems of first and second degree equations.

GRADING PROCEDURE:

Class Attendance.....	25	3.85%
5 Quizzes (25 Points Each).....	125	19.23%
4 Hourly Exams.....	400	61.15%
Final Exam (cumulative).....	<u>100</u>	<u>15.38%</u>
Total Points Possible.....	650	100.00%

TENTATIVE SCHEDULE OF QUIZZES & EXAMS:

Quiz 1.....	September 16
Exam 1.....	September 23
Quiz 2.....	October 7
Exam 2.....	October 14
Quiz 3.....	October 28
Exam 3.....	November 4
Quiz 4.....	November 18
Exam 4.....	December 2
Quiz 5.....	December 9
Final Exam.....	T.B.A.(Week of December 15)

NOTE 1: A list of all the homework for the semester will be distributed during the first week of the semester. Homework is designed to give you practice on the material covered in class and should be used by you to assess your understanding of the material covered on it. Use paper and pencil to do the homework that corresponds with the material covered in class. Check your answers with those provided at the back of the textbook. If there are any problems you cannot do, you should make note of them and either see me during an office hour to learn the concept you missed or ask about the problem during that part of each class designated for going over the previous night's homework.

NOTE 2: **No make-up Quizzes will be given during the semester without instructor approval.** Only the best 4 out of 5 Quizzes will be counted in your average for the course.

NOTE 3: **No make-up Exams will be given during the semester without prior instructor approval.** The Final Exam will be divided into clearly labeled sections representing the material covered on each of the hourly exams as well as one section representing material covered after the last hourly exam. If a student has a better grade on the section of the Final than he received on the corresponding hourly exam, that grade will replace the hourly exam grade.

NOTE 4: Students requiring special accommodations **should inform the instructor during the first week of the semester** so that appropriate arrangements can be made.

NOTE 5: Cell phones, MP3 players, and other electronic devices can be distracting to your classmates and your instructor. **Please turn off all electronic devices during class time.**

NOTE 6: While the use of a **graphing utility** is acceptable when doing homework, one will **not be permitted for exams and quizzes. Be sure to bring a non-graphing, scientific calculator to class on testing days.**