TALLAHASSEE COMMUNITY COLLEGE
PRECALC // MAC 2140 // REF# 58342
SYLLABUS for SUMMER SEMESTER 2008
Published Saturday, May 03, 2008. Revision # 01 Date: 5-04-08

INSTRUCTOR: Doug Jones
CLASS DAYS: MTWR
CLASSROOM: SM 129

MY OFFICE: SM 243
Office Hours
11:00-12:00 MTWR SM 243

MY PHONE: 201-8120
DEPT. FAX: 201-8119
MY EMAIL: jonesd@tcc.fl.edu

CLASS TIME: 8:40 am — 9:35 am.

OUR CLASS BEGINS: Tue., May 6
LAST DAY TO "W" or "AW": Tues., Jun. 24
ALL CLASSES END: 5pm Wed., Jul. 16
YOUR FINAL EXAM: 7:00am - 8:45am Thurs., Jul. 17.


2. PREREQUISITE: A grade of C or better in MAC 1105 (or in MAC 1102, if taken before Fall Semester 1991, or in MAC 1104, if taken before Fall Semester 1998).
THERE ARE NO EXCEPTIONS TO THE ABOVE PREREQUISITE POLICY! If you do not meet this prerequisite policy, I am required to drop you from the roll.

3. COURSE DESCRIPTION from CATALOG: MAC 2140 Precalculus (3) FA SP SU. Prerequisite: "C" or better in MAC 1105 (or MAC 1104). This course is one of the prerequisites for MAC 2311, Calculus with Analytic Geometry I. Topics include polynomial and rational functions; applications of exponential and logarithmic functions; proof by mathematical induction; solutions of higher
degree polynomial equations and inequalities; solutions of systems of equations using matrices and determinants; sequences and series; the binomial theorem; and an introduction to conic sections. A graphing calculator is required. Please check with your instructor for the most appropriate one for the course. Lecture 3 hours.

4. GRADING POLICY:

A. GRADING SCALE

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>&gt; 89.5</td>
</tr>
<tr>
<td>B</td>
<td>&gt; 79.5</td>
</tr>
<tr>
<td>C</td>
<td>&gt; 69.5</td>
</tr>
<tr>
<td>D</td>
<td>&gt; 59.5</td>
</tr>
<tr>
<td>F</td>
<td>≤ 59.5</td>
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</tbody>
</table>

B. Look for your grades on BlackBoard.

C. FACTORS DETERMINING GRADE

1. THE AVG OF YOUR QUIZZES, POD's TURN-IN HOMEWORK, and NOTEBOOKS counts as 1 TEST. (Call this avg HQ).

2. THE AVG OF YOUR 3 TESTS AND YOUR HQ COUNTS 75% of YOUR COURSE GRADE. THAT IS: \(\frac{T1+T2+T3+HQ}{4} = 75\%\) of YOUR GRADE.

3. YOUR CUMULATIVE FINAL EXAM COUNTS 25% OF YOUR COURSE GRADE.

4. THIS RESULTS IN THE FORMULA

\[ G = \left(\frac{3T1 + 3T2 + 3T3 + 3HQ + 4E}{16}\right) \]

Where G is your FINAL GRADE (numerical), and E is your FINAL EXAM grade.

5. ATTENDANCE and ADMINISTRATIVE WITHDRAWAL POLICY: Attendance is required and roll will be checked daily. Coming in late or leaving early may be counted as an absence. If you accumulate more than two absences, you may be administratively withdrawn. However, do not assume that you will be withdrawn if you quit attending class. It is your responsibility to make sure you are withdrawn. The last day for you to withdraw or for me to administratively withdraw you is Tuesday, June 24, 2008.

If you are absent, it is your responsibility to contact me, check the class web page, or contact someone in the class to find out what was covered in class and what homework was assigned.

The pacing schedule may be changed as we go through the semester. You should be in class (each meeting) so that you are aware of the changes.

6. GOALS OF THE COURSE: This course is designed for mathematics, science, engineering, and mathematics education majors and for students who plan to take trig-based calculus (MAC 2311). This course can be used to satisfy part of the General Education Mathematics Requirement or it can serve as an elective. You will find complete listings of the Course Outline and the Performance Objectives in the Master Syllabus, which is on file in the Science – Math Department Office.

7. ATTENTION: ENGINEERING STUDENTS! There are more stringent performance standards-and-requirements for engineering students than for the general university population. For example, the following information is taken from the FSU Undergraduate Academic Program Guide, requirements for Mechanical Engineering, and other engineering disciplines may have slightly different requirements. Also, Colleges of Engineering at other Universities may have even stronger requirements.

Admission Requirements to Major Program of Studies.

To be admitted, students must complete at least 52 hours of credit with an adjusted GPA of 2.0, including at least half the required hours in the Liberal Studies program, including all of Area I (English, Math). In addition, the student must meet the College of Engineering pre-engineering requirements before the student declares the intended engineering major:

- A grade of “C” or better in EGN 1004L (1) First Year Engineering Lab. One repeat attempt is permitted. Complete course in freshman year or first year at FSU;
- A grade of “C” or better, from any institution attended, in Calculus I (4), Calculus II (4), General Chemistry I with Lab (4), and General Physics I with Lab (5).
- A single repeated attempt in only one of these courses is allowed. (my underlining added for emphasis)
Visit the link above for more information.
Also, here is a recent update from the FAMU/FSU College of Engineering. [ top ]

8. CALCULATOR REQUIREMENTS: You will need a graphing calculator in this class. Bring it to class with you every day. If you have not bought one, I suggest the TI-83 PLUS, or something comparable. I shall use a TI-84 PLUS, SILVER EDITION, in class almost every class period.

No specific brand or model of calculator is required; however, certain calculators are not allowed. Models such as TI-89, TI-92, TI VOYAGE 200, & HP-48 (series) are not allowed, as well as any other device having a "qwerty" keyboard and/or symbolic computing capability.

Also, for several reasons, I suggest that you buy your own calculator and not just borrow one from your friend —

1. You are entering the level of your education which is beyond the "general knowledge" or "liberal arts" stage. You have chosen a professional, technical career track, and your calculator will become one of the standard instruments of your profession. A lawyer has his/her own law books, a musician has her/his own instrument, a doctor has her/his own stethoscope, . . . . Get the picture?
2. I shall reset, not clear, but reset your calculator at the beginning of each TEST, QUIZ, or FINAL EXAM. And I am sure that your friend would not appreciate having all her or his programs erased from memory.
3. Also, if you have your own calculator, then you probably will have your own manual that goes along with the calculator. And as I give periodic instruction on the use of your calculator, I shall often refer to specific pages in your calculator manual.

9. OTHER EQUIPMENT: In addition to a graphing calculator, discussed above, you will need the following equipment:

- a straightedge,
- a compass,
- a protractor,
- a mechanical pencil (0.5 mm with HB or B lead), and
- a decent eraser (One may come with your pencil, but I doubt it!)

10. WEB PAGE: The PRECALC WEB PAGE is an important learning & teaching tool. But to use it as a substitute for attending class is a mis-use.

On the WEB PAGE I will post

- The Syllabus and Pacing Schedule,
- Daily Notes of what we did in class,
- Copies of "Old Tests" and/or "Study Guides" before Test Time,
- Announcements and Reminders, and
- Interesting Precalc-related "Hot-Links."

Here are some of the ways that you can effectively use the PRECALC WEB PAGE:

- If you must miss a class, you can find out what we did that day, read over the material on your own, try to make sense out of it, and prepare any assignments and/or reading for the next class.
- Even if you were in class, you can read the daily notes to see what I thought that I taught you that day! (I say this because it seems to often happen that what a teacher thinks that (s)he taught and what a student learns are two
different things!)

11. HOMEWORK:  Homework must be done in order to succeed in this class! If you are unwilling or unable to devote at least two homework hours outside class for every hour inside class (*), you will not realize your true potential in this course.

There are three types of homework assigned in this course:

- **PROBLEMS-OF-THE-DAY (PODs):** I will give the problem in class — not every day, but many (or "most") days. It might be a textbook problem, or it might be a problem that I make-up on the spot. Then you work the problem and turn it in at the beginning of the next class period. Group work is allowed, permitted, and encouraged on PODs.

- **TURN-IN HOMEWORK (TI):** Selected homework problems will be assigned and collected at specified times. These problems will be graded for technique, accuracy, and neatness. At the end of the semester, the lowest TI score will be dropped before computing your homework average.

- **NOTEBOOK HOMEWORK (NB):** These problems are to be done on a daily basis. These problems should be kept in a Black Marble Lab Book. Each section must be clearly labeled. I shall periodically spot-check your NOTEBOOK. Also, you will turn in your notebook at the beginning of the class on test day. At this time, the degree of completion of the assigned problems will result in a grade. Each NOTEBOOK GRADE will count as three (3) turn-in assignments. No NOTEBOOK GRADE will be dropped.

Detailed instructions on how to prepare your homework will is given in these separate hand-outs:

- How To Do Homework — And Why. (pdf)
- About Your Notebook! (pdf)
- How To Write-Up Problems (html)

(*) Note: This is just homework time. It does not include the time necessary to read the textbook, work the examples in the textbook, and think about the material! All three of these activities should be done before you start to work your homework problems!  [top]

12. QUIZZES:  Frequent quizzes, both "in-class" and "take-home" will be given. At the end of the semester, the lowest QUIZ score will be dropped before your quiz average is computed.  [top]

13. TESTS:  There will be three (3) unit tests during the semester. The tentative test dates are:

- Test #1, Tues., May 27, 2008,
- Test #2, Thurs., June 19, 2008, and

There may be a few multiple-choice questions on each test, but most of the test problems will be "free-response" aka "work-em-out," and considerable credit will be given for correct technique, proper application of theory and concepts, and logical, professional presentation. Also, each test may have some "carry-over" problems from the previous tests.  [top]

14. BONUS PROBLEMS:  From time-to-time, bonus problems will be assigned. If you don't do them, it will not count against you; however, if you do them, it will boost your homework average.  [top]

15. FINAL EXAM:  The Final Exam will be cumulative.

It will be given in this room Thurs., July 17, 2006, between 7:00 am and 8:45 am. 

No one will be permitted to begin the EXAM after the first person has left the room.
There will be no early exam, no late exam, and no make-up exam! IF YOU MISS THE FINAL EXAM, IT IS AN AUTOMATIC "F" IN THE COURSE.  

16. MAKE-UP POLICY AND DUE-DATES:  This is summertime. Time moves very fast. Therefore, there will be no "late" or "make-up" homework, quizzes, bonuses, tests, or the final exam. All work is due at a "time certain," and late work will not be accepted. Any missed assignment gets a zero. Period. End of Report!

If you miss one test, I can substitute your final exam grade for the missed test grade if and only if you have a very good, documentable reason for missing the test.

I will drop 1 of your Turn-In Homework scores, and I will drop 1 of your Quiz scores to compensate for this "zero-tolerance" policy.

However, no POD grade and no Notebook-Homework grade will be dropped.

17. CLASSROOM POLICY:

1. No eating, drinking or smoking is allowed in classrooms.
2. Please place all trash in the appropriate container.
3. Please turn off or silence your cell phone before coming to class. If any cell phone goes off during class, I will count the rings (or seconds) and the owner will have one point per ring (or sec.) taken off the next paper that I grade, be it quiz, homework, test, or final exam!
4. Absolutely, positively NO CELL PHONE anywhere near you DURING ANY TEST OR QUIZ.
5. Inappropriate language will not be tolerated. I do not use profanities or vulgarities, and I expect the same from you. Once you are in the professional world your employer will insist on this behavior.
6. During about the first week of classes, or until I say otherwise, on entering the classroom, please leave the first "row" empty. This "row" (actually -- from the teacher's perspective it is a "column") is reserved for students who either arrive late or leave early. I do not expect to see any student sit regularly in this row!
7. Out of courtesy to both me and your fellow students, when the class has started, I expect and require that you give me your undivided attention. The only talking that should go on is my instruction and explanations, my questions and answers to you, and your questions and answers to me. If you have a question, ask me, not your neighbor. If I decide that I want your neighbor to help you, then I shall say so. What I have to tell you is important, and I want you to listen, pay attention, take notes, and understand — all at once. This requires concentration, and peripheral distractions are detrimental to your learning process.

18. OUTSIDE HELP: Only about 25% – 33% of your learning of precalc will occur in the classroom. As you read and study the material, and as you work on your homework, you will need outside help. I enjoy helping students in small groups or in a one-on-one setting. As a matter of fact, I think that all the teachers here at TCC love to give extra help. Just come by my office during my office hours (which are fairly extensive) or by appointment, and I'll help you. It would be best if you come to me with specific questions after you have read the material and tried the examples. Then we can use our time efficiently.

Also, there is very good help available in the Math Center, DH 225, Phone: 850-201-8251.

19. TCC ENGINEERING CLUB:  If you are at all interested in ENGINEERING as a profession, I invite you to participate in the TCC ENGINEERING CLUB.
For more information, please visit the TCC ENGINEERING CLUB WEB PAGE at: http://tccengineeringclub.com/ or check out the TCC ENGINEERING CLUB BLOG AT: http://engineeringtcc.blogspot.com/