PRECALCULUS - MATH 2312.003  
Department of Mathematics & Statistics  
Spring 2015

A. COURSE INFORMATION

Course number/section: MATH 2312.003
Class meeting time: MWF 11 - 11:50 am
Class location: CI 108
Course Website: bb9.tamucc.edu

B. INSTRUCTOR INFORMATION

Instructor: Melina Wijaya
Office location: CI 116
Office hours: MW 1:30 - 3:15 pm, TR 2 - 3:15 pm, and by an appointment
Telephone: (361) 825-3373
e-mail: melina.wijaya@tamucc.edu
Appointments: Send me an email

C. COURSE DESCRIPTION

Catalog Course Description
A more rapid treatment of the material in MATH 1314 (College Algebra) and MATH 1316 (Trigonometry), this course is designed for students who wish a review of the above material, or who are well prepared. Functions, graphs, trigonometry, and analytic geometry.

Extended Course Description
None.

D. PREREQUISITES FOR THE COURSE

Prerequisites
MATH 1314 (College Algebra) or placement into MATH 2312 (Precalculus)

Corequisites
None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)
MyLabsPlus student access code. You will need to purchase it separately at the bookstore or log on to www.tamucc.mylabsplus.com and purchase it online. The technical support line is 1-888-883-1299. The website is www.tamucc.mylabsplus.com. Use your A# for User Name and ask for a password reset.
Optional Textbook(s) or Other References


Supplies

In addition, you will need a graphing calculator.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the courses student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

By the end of this course, students should be able to:

1. Work with some basic concepts:
   - multiply and factor polynomials
   - work with rational expressions
   - simplify rational exponents
   - rationalize fractions

2. Solve equations and inequalities:
   - solve linear equations
   - solve quadratic equations
   - determine and graph the solution set of an inequality
   - solve absolute value equations
   - solve exponential and logarithmic equations
   - solve trigonometric equations
   - solve systems of linear equations

3. Graph functions and circles:
   - graph circles whose equation needs to be simplified first
   - determine whether a given graph is the graph of a function
   - graph linear functions
   - recognize the graphs of some basic functions
   - use graphing techniques, such as shifts and stretches
   - determine from a polynomial how its graph will look
   - find axis-intersects for polynomials
be able to graph trigonometric functions and their translations

4. Work with inverse functions and polynomials:
   • determine from the graph of a function whether it has an inverse
   • check whether two functions are inverses of each other
   • find the equation of the inverse of a function
   • use continuous compounding and exponential functions
   • use logarithms as inverse functions of exponential functions
   • simplify logarithmic expressions
   • graph and find values for the inverse circular functions

5. Have a solid base in trigonometry:
   • convert between degrees and radians
   • know the values of the basic trig functions for special angles
   • solve right triangles
   • use the circular functions to find coordinates of points on the unit circle
   • have the fundamental trigonometric identities memorized
   • be able to verify trigonometric identities
   • simplify trig expressions using the double angle identities

G. INSTRUCTIONAL METHODS AND ACTIVITIES

The instructional method is a combination of lectures and student activities. Students are expected to participate through in-class activities, preparation for class meetings, and homework.

H. MAJOR COURSE REQUIREMENTS AND GRADING

\[
\begin{array}{|l|c|}
\hline
\text{ACTIVITY} & \% \text{ of FINAL GRADE} \\
\hline
\text{Homework} & 15\% \\
\text{Quizzes} & 15\% \\
\text{Exams} & 45\% \\
\text{Final Exam} & 25\% \\
\hline
\end{array}
\]

Grading Scale

\begin{array}{|l|}
\hline
90-100\% & A \\
80-89.99\% & B \\
70-79.99\% & C \\
60-69.99\% & D \\
0-59.99\% & F \\
\hline
\end{array}

Homework (15\%) – Homework will be assigned online every Friday through MyLabPlus. Homework will be available all semester. However, 5% deduction per day will be applied from problem worked after the due date. At the end of the semester the two lowest homework grades get dropped. Office hours are a great opportunity to ask questions about homework. On-campus free tutoring in the CASA is another way to getting help with the homework.
Quizzes (15%) – The weekly quizzes are given online every Friday through MyLab-sPlus. You can take them anytime between midnight and midnight of the Friday. You have two attempts to do each quiz. The quizzes are similar to the homework but have no help options available. Of course you may not get any help with the quizzes. Missed quizzes can not be made up, but the lowest two quizzes get dropped at the end of the semester.

Exams (45%) – There will be three exams, which will be given in class. Calculators will be allowed unless otherwise instructed. Exam dates will be announced at least one week in advance. No exam grades get dropped.

Final Exam (25%) – The final exam will be comprehensive.

I. COURSE CONTENT/SCHEDULE

Tentative course schedule:

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<td>May 4</td>
<td>Review for Final</td>
<td>Final Exam</td>
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Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.
J. COURSE POLICIES

Attendance/Tardiness

- Attendance will be taken each class.
- For most students attending class is a faster way of learning the material than trying to catch up on missed material solely from the book.
- Tardiness is often disruptive to the whole class and is not appreciated. If you are delayed and arrive late for class please do so quietly.

Cell Phone Use

- Cell phones and such must be turned off before class.

Missed Exam

- If you have to miss an exam, it is your responsibility to contact me no later than the day of the exam. One make-up exam will be scheduled for each exam.
- Failure to contact me on or before the exam day results in a grade of zero points for the exam.
- Only extreme emergencies or official university business are acceptable reasons to miss exams and documentation will be required. Car trouble, routine doctor’s appointments, family reunions or graduations of siblings etc are not valid reasons to miss exams. If your reason to miss the exam is not a valid one, your exam score is 0 points. Be sure to check before missing an exam whether your reason is acceptable.
- If you miss the date of the final exam you will receive a ZERO. There are no make-ups for the final exam. PLAN AHEAD!!!

K. COLLEGE AND UNIVERSITY POLICIES

- **Academic Integrity (University)**
  It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior.
  See Full University Policy at http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity

- **Classroom/Professional Behavior**
  Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructors ability to conduct the class or (b) the
ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- **Deadline for Dropping a Course with a Grade of W (University)**
  The grade of W will be assigned to any student officially dropping a course by Friday, April 10, 2015. No student is eligible to receive a W without completing the official drop process by this deadline. Visit the Office of the University Registrar for the Course Drop Form that must be submitted. After April 10, 2015 a student will not be allowed to drop a course.

- **Grade Appeals Appeals (College of Science and Engineering)** As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at


  and the College of Science and Engineering Grade Appeals webpage at

  [http://sci.tamucc.edu/students/GradeAppeal.html](http://sci.tamucc.edu/students/GradeAppeal.html)

  For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **Disability Services**
  Disability Services (DS) is the hub for coordinating services and accommodations to ensure accessibility and utilization of all programs for all Texas A&M University-Corpus Christi students with disabilities. Our services are designed to meet the unique educational needs of enrolled students with documented permanent or temporary disabilities. DS provides intake and consultation services to students seeking to register with our office. DS reviews an individuals documentation of disability and assesses eligibility for services and the determination of reasonable accommodations. For more information visit the Disability Services Office at 116 Corpus Christi Hall or go to [http://disabilityservices.tamucc.edu/](http://disabilityservices.tamucc.edu/)
L. IMPORTANT DATES

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<tr>
<td>Wednesday, January 21</td>
<td>Classes begin</td>
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<tr>
<td>Monday-Friday, March 16-20</td>
<td>Spring Break</td>
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<td>Friday, April 10</td>
<td>Last day to drop a class</td>
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<td>Monday, May 4</td>
<td>Last day to withdraw from the University</td>
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<td>Tuesday, May 5</td>
<td>Last day of classes</td>
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GENERAL DISCLAIMER

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.