

Precalculus 2010-2011

Textbook: **Calculus 1 with Precalculus**, Larson, Hostetler & Edwards: Houghton Mifflin.

COURSE PURPOSE

Pre-calculus is an advanced analysis course which focuses on God's order as it relates to mathematics. It is intended for high school or college bound students who are interested in taking Calculus or perusing a career where higher-level mathematics is required. The material covered will expand the students' knowledge of mathematical notation, algebraic concepts and processes that are directly related to Calculus. As a result the knowledge gained will be most beneficial for those students planning on taking Calculus, or in achieving any other educational and career goals the Lord has guided them towards.

COURSE TOPICS

First Semester

- Functions
- Polynomial and Rational Functions
- Exponential and Logarithmic Functions
- Sequence and Series
- Vectors, Parametric, and Polar Equations?

Second Semester

- Limits
- Differentiation
- Applications of Derivatives
- Integration?

CLASSROOM GUIDELINES:

1. Students must be in their seats by the time the bell rings.
2. Students are to be active learners.
3. Students are to show Christian respect to the teacher and their peers.

STUDENTS RESPONSIBILITIES:

1. Students are responsible for using the gifts the Lord has given them to their fullest potential.
2. Homework should be completed before the student enters the classroom.
3. All work will be shown for every problem according to the guidelines shown in class.
4. Bring binder with paper, pencil and a graphing calculator to class every day. **(TI-84plus is preferable)**

GRADING***Quarter***

Assignments/Daily Quizzes/Reflections- 20%

Quizzes/Take Home Tests/Projects- 30%

Tests- 50%

Math Track: Extra Credit

Semester1st /3rd Quarter- 40%2nd /4th Quarter- 40%Semester 1st/2nd Exam- 20%**GRADING INTERPRETATIONS & CLASSROOM GUIDELINES**

Assignments consist of in class work and homework. Homework assignments will be given regularly and should be completed on arrival to class. Homework will be collected and graded on effort and completeness, these assignments are worth 5 pts each. See rubric below. Missing assignments are 0 pts. Late assignments and homework that receives a 0 may be turned in the 1 weeks from the day it is due or returned for half credit, after one week no credit will be given.

Homework Grading

Homework will be assigned daily. It is meant to help increase your understanding of the material and also aid in identifying concepts that you do not understand. It is the students' responsibility to finish their homework completely before the day it is due. If questions arise it is the responsibility of the student to get help from a parent, teacher or another student and make notes on assignment. Homework will be graded on completeness, quality and demonstrated learning.

	Completeness and Quality
5	-100% of the problems are attempted. -Work is shown. -Wrong answers are corrected and notes are made. -Written nicely, easy to read and follow.
4	90% of the problems are attempted, work is shown, most wrong answers corrected and written nicely.
3	80% of the problems are attempted, little work shown, some wrong answers corrected and/or written poorly.
2	70% of the problems are attempted, little work shown; few wrong answers are corrected and/or written poorly.
1	60% of the problems are attempted, no work shown; few wrong answers are corrected and written poorly.
0	50% of the problems are attempted, work shown and written nicely.

- **Quizzes** will be given frequently. Daily quizzes (1-5pts) may not be made up. Scheduled quizzes are larger, like tests, but cover only a few units or specific topics..
- **Take Home Test and Projects** may be given. Take home tests and some projects students will be encouraged to work together to gain a better understanding of skills and concepts presented in class.
- **Tests** will be given after each unit. Generally 3 tests per quarter are given and are 100 points each. Students who miss one-day prior to test must take test on date given or next day. Students who are absent the day of the test must take test on day of return. If absent student does not take test on re-scheduled date 2-percentage points maybe deducted daily until taken. Special circumstances may be given to students with extended absences in the week, etc. Tests may not be retaken.

- Students must also bring necessary **materials** to class each day, such as their **book, a 3 ring binder with a section for notes and homework, pencil and calculator (TI-83/84 Plus)**. Students who repeatedly forget their materials will face other disciplinary action.
- If a student is **absent** it is the job of the student to obtain missed notes and assignments, either from the teacher, a peer, or visit the website: www.wiscomathematics.com. Absent assignments are 0 but can be made up for full credit. These assignments must be turned in 2 days from absent date or assignment will be considered late. Special exceptions will be made for long-term absences.
- Students should be actively participating in class. **Participation** includes answering or asking questions, helping others with concepts, and doing assignments presented in and outside of class. Students not participating with assignments in class may have their homework grade lowered. Students who disrupt others or the teacher by not actively participating in class may receive other disciplinary action.
- Students are encouraged to create study groups and collaboratively work on assignments, take home tests and projects together.
- **Cheating:** Students who copy answers or ask for help during quizzes and tests of peers are cheating. Also students, who simply copy other students' assignments, take home tests and projects are cheating. If you are caught cheating a zero score will be given to the cheater and the knowing accomplice(s). Other disciplinary measures may also be taken.
- **Keys to Precalculus/College Success**
 - 1) **Take quality notes.** Notes are not just problems or information presented in class. Notes is information that you feel needs to be remembered or answered.
 - 2) **Work hard and give you best effort.** If you do not want to work then don't expect to learn much. Your effort in this class gives glory to God, so always look to do your best.
 - 3) **Do your homework.**
 - 4) **Ask meaningful questions.** Precalculus can get hard, since it is the stepping stone to Calculus, which is much more abstract. "I don't get it" is not a question. Look to ask a specific question about what confuses you or what you do not understand.
 - 5) **Start a study group.** Always look for people you can trust and look to learn from them as they may learn something from you. Being able to explain your answer to other reinforces the idea and give you a better understanding that might be smarter than you.
 - 6) **Think.** Thinking requires hard work, time and effort. If you do not want to think, Precalculus and college will be very discouraging for you.