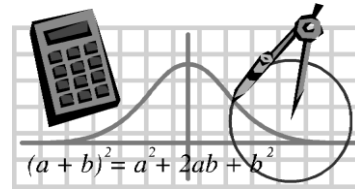


Pre-Calculus Syllabus (including Grading Blueprint)

Teachers: Ms. Schultz & Mrs. Skinner
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Course Description

Pre-Calculus covers all of those topics studied in Algebra II and Trigonometry, but goes a step further. Pre-Calc delves a bit deeper into the “12 basic functions”—identity, quadratic, cubing, reciprocal, square root/radical, exponential, natural logarithm, sine, cosine, absolute value, greatest integer, logistic functions—as we analyze each of these functions. We also solve equations involving these functions and inequalities (for most of them). You will be introduced to a plethora of applications using these functions! We will even take a look at discrete mathematics and the basics of calculus.

The prerequisites for Pre-Calculus are Algebra I, Geometry, Algebra II and Trig/Pre-Calc. (Trig/Pre-Calc may be taken concurrently w/Pre-Calculus.)

(Pre-Calculus has been articulated with Gateway’s College Algebra and Trigonometry w/Applications.)

Topic Outline

Pre-Calculus begins with a review of topics covered in Algebra II. Then we take a look at the basic Calculus concepts of limits and continuity. We use this as we study functions—linear, quadratic, polynomial, power, rational, exponential, logistic & logarithmic functions—and their graphs; going beyond what you learned in Algebra II and Trigonometry.

Second semester starts with a review of Trigonometry. Then it’s back to Algebra II. We conclude the course with an introduction to Calculus: limits and derivatives.

Do not let any of this overwhelm you! You have already been exposed to a majority of the topics covered in this course; we are just going to go one step further as this is a college algebra (with trigonometry) course.

(Pre-Calc’s topics have been aligned with Gateway’s course competencies. To view the complete detailed outline, please go to schultzjen.weebly.com OR Pre-Calc’s Moodle site.)

To see additional content and student learning objectives for this course, please go to www.westosha.k12.wi.us and click on curriculum.

Required Supplies/Materials/Technology

WHAT DO I NEED FOR PRE-CALCULUS?

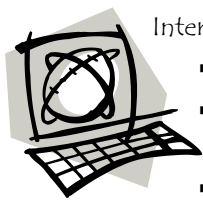
- a writing utensil, notebook & your agenda
- a binder (recommended)

If you’ve had me in the past, you know how significant the binder is.

- a Texas Instruments graphing calculator Avoid Casios!

Teacher Testimonial: I recommend the TI-84. I’ve had mine since I was a sophomore in high school & it got me through my advanced math courses in college. Therefore any TI grapher 85 & above, is not technically better; plus, I can’t assist you with any TIs greater than 84.





Internet access because...

- MOODLE
- There will be times that I will ask you to watch a presentation online via the Khan Academy: www.khanacademy.org
- You can practice, review and receive help at www.interactmath.com
- I'm online! schultzjen.weebly.com
- Last, but not least: a great attitude

WHAT IS THE TEXT?

Pre-Calculus: Graphical, Numerical, Algebraic, 7e. Demana, F., [et. al], Addison Wesley, © 2007 Pearson Education, Inc.



Grading Buckets

Assignments are classified into categories (Grading Buckets) focused on the targeted learning of the course. Each bucket is weighted and contributes to the overall achievement grade. The weighted grading buckets for Pre-Calculus are:

- Content Knowledge (15%)
Think...vocabulary, defining or describing; recalling information
- Procedural Knowledge & Skills (50%)
Think...solving equations & inequalities; finding zeros; problems in which you evaluate...determine...find...solve...
- Applications & Modeling (20%)
Think...solving word problems...regression models
- Technology (15%)
Think...function analysis, online activities and beyond!



Course Grades

Students will earn an Achievement Grade and a Life Skill grade for this course.

Achievement Grade

- **Achievement grades will be based on summative assessments**, which require students to demonstrate their understanding of the learning goals. A summative assessment occurs after a student has had the opportunity to practice, receive explicit feedback, and correct errors in learning or thinking.
 - **All summative assessments require a grade of 60% or higher. Any assessment below 60% will be recorded as "Missing", which calculates to a 0%.**
- **Formative assessments** are practice opportunities that allow students to refine their understanding of new knowledge and skills without penalty. They occur during the learning process and provide students with specific feedback to inform their learning. They also provide teachers with feedback to improve instruction. **Formative assessments will not count toward the achievement grade.**

Life Skill Grade

- The Life Skills grade will be assessed using a universal rubric. Please see the attached rubric.
- Life skills will be recorded:
 - Daily
 - Weekly
 - Bi-weekly

Grade Descriptors

- A** Students earning grades within the “A” range demonstrate proficiency **and** consistently exceed the standard.
- B** Students earning grades within the “B” range demonstrate proficiency **and** at times exceed the standard.
- C** Students earning grades within the “C” range demonstrate a proficient level of mastery of the targeted knowledge and skills.
- F** Students receiving an “F” have not met the expectations for demonstrating the knowledge and skills as indicated by the learning targets within that course.

Opportunities for Reassessment

Reassessment is done at the teacher’s discretion and must be completed within an acceptable time frame as defined by the teacher. Students meeting eligibility criteria will have the opportunity to retake specified assessments. The ability to reassess in this course is described below:

- **Which assessments?** Any assessment (excluding content knowledge)
- **Eligibility criteria:** Students must have turned in all homework from that unit as well as complete test corrections with error analysis.
- **Time frame:** You have two weeks, upon receiving an assessment back to complete an error analysis and retake the assessment.

Extra Credit is Not Allowed

Grades are supposed to be measures of achievement, so it is appropriate that students have “extra” opportunities to improve their grades. Extra opportunities, however; must involve the demonstration of the knowledge and skills of the learning targets of the course. If these extra opportunities are to be valid, that is to raise a student’s grade from a C to a B for example; the additional demonstrations of knowledge and skills need to be at a higher level of achievement and not just more work to earn more credit.

Non-Negotiable Assessments

A non-negotiable assessment is one that must be completed to pass the class despite the student’s grade average. The following are considered non-negotiable assessments in this course:

- n/a

Missing Work

Missing work whether due to excused absence or other reasons will be recorded as “Missing”, which calculates to a 0%.

Absences

Students who are absent from school shall be permitted to make up course work and examinations when they return to school. It is the student’s responsibility to contact his/her teachers to determine what course work and examinations must be made up. Teachers shall have the discretion to assign substitute course work and examinations, as well as to specify where and when examinations and course work shall be completed. The time for completing the work shall be equal to the length of the absence, unless extended by an administrator based upon extenuating circumstances.

Self-Monitoring

Students are expected to review their grades regularly in Infinite Campus. Students are also expected to check their email daily. If there is a discrepancy in a recorded grade, please communicate with the teacher.

Classroom Procedures

- Follow directions the first time given.
- Be on time to class and prepared for class.
- Use appropriate language to build others up.
- Raise your hand to speak and remain in your desk until you have permission to leave.
- Do not pack up until 1 minute before the bell.