

## Dual Enrollment Pre-Calculus

1<sup>st</sup> Semester: MAT 152 College Algebra (3 credits)

2<sup>nd</sup> Semester: MAT 182 Plane Trigonometry (3 Credits)

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### Office Hours

The following times may change periodically due to other scheduled meetings

7:30 – 8:10	Achievement Hour Days
2:10 – 2:45	Thursdays
By appointment	

### Textbook

Precalculus: A Make It Real Approach (1<sup>st</sup> edition), Wilson, Adamson, Cox and O'Bryan, 2013

Pre-Calculus with Limits – a Graphing Approach (4<sup>th</sup> edition). Larson, Hostetler and Edwards, 2005

Text website:

[http://college.cengage.com/mathematics/larson/prec calculus limits\\_aga/4e/students/index.html](http://college.cengage.com/mathematics/larson/prec calculus limits_aga/4e/students/index.html)

### Course Description / Content

This is a dual credit course which means a student will receive high school credit for successfully completing the course but will also receive college credit by concurrently enrolling in Chandler Gilbert Community College and paying the tuition for the class. This class is 3 credit hours each semester. The first semester is MAT 152 College Algebra and the second semester is MAT 182 Plane Trigonometry. Applications for enrolling in the college class will be sent home with the students in August. Payment for the class is usually due the middle of September.

#### **Semester 1 – College Algebra Content**

Modeling Functions  
Linear Functions  
Quadratic Functions  
Polynomial Functions  
Rational Functions  
Exponential and Logarithmic Functions  
Systems of Equations  
Sequences and Series  
Conic Sections

#### **Semester 2 – Plane Trigonometry Content**

Trigonometric Functions  
Solving Right Triangles  
Circular Functions  
Graphs of Trigonometric Functions  
Inverse Trigonometric Functions  
Trigonometric Identities  
Law of Sine  
Law of Cosine  
Trigonometric Form of Complex Numbers

### Calculator

A graphing calculator is required. I will be using the TI-84. The TI-83, TI-83 plus, TI-84 plus or TI-Nspire may also be used. If you buy any other calculator, please bring your instruction manual to class on a daily basis, since you will be teaching yourself how to use your calculator.

### Attendance

Regular attendance is expected. If you know you will be absent, the work is due prior to the absence unless you coordinate an alternative with me before the due date. Absences are not a valid reason for being unprepared for class, not turning in assignments on time or for missing a test or quiz. **You are responsible for the material presented when you are not in class. Contact classmates to ensure you are prepared for the next class. Late work will receive zero credit.**

### Outside Preparation

The Arizona Board of Regents for Community Colleges has established as a general guideline that each course should require a student to spend a minimum of two hours in preparation outside the class for each hour spent in class. The time outside of class should be devoted to reading, taking chapter notes, computer work, preparation for group activities, tests, quizzes, etc.

### Homework

Homework will be assigned on a daily basis and will be graded the next day; however it will not be turned in until the following Monday. Homework may include reading of the assigned material which will need to be completed by the next day. It is the student's responsibility to come to class prepared to share and discuss solutions. If a student earns an A or a B on the unit exam, full credit for homework will be given. If you earn a C, D or F you will be assigned the percent of the assigned problems completed. Periodically, I will ask for an assignment to be turned in the next day and I will grade it for accuracy.

### Projects and Activities

There will be projects and class activities assigned on a regular basis that are designed to enhance the study of the course material and help develop critical thinking skills. The activities will usually be due the same day or the next day while the projects may take at least a week to complete and will require graphing calculators and/or computer applications. Research has shown that achievement levels are higher and retention greater when learning takes place in a cooperative environment. This means that discussing ideas with and asking questions of your colleagues is of more benefit than having me entertain you. In other words, you should be spending class time thinking about and doing mathematics rather than passively listening and watching while the instructor does mathematics. You will be assigned a cooperative group of 3 – 4 students the first day of class. This will be your support group. You will work together on classroom tasks and projects. Your group members will be responsible for getting handouts and information to you should you miss a class. You may also be assigned to other groups during the course.

### Late Work

Any homework or classwork turned in after I collect it will be considered late and will receive no credit unless prior arrangements have been made. . **If a student knows he/she will be absent for any reason including a school related activity, the work is to be completed and turned in before attending the event (unless prior arrangements have been made with the instructor) in order to receive full credit for the assignment.** Any long term project will not be accepted late for any reason. If you are absent the day the assignment is due, it is still your responsibility to get the assignment to me. Please call or e-mail to make arrangements.

### Tests and Quizzes

There will be announced quizzes periodically (5 - 20 pts) and a cumulative test at the end of each unit (100pts). Some of the sections may have a mid-chapter test worth 50 points. Test corrections will be made so that you may go back and reflect on what has been learned and what needs to be done better. When doing your exam corrections, be sure to include:

- Corrections for any problem that you got wrong or skipped on a separate sheet of paper
- A written explanation about why each problem was missed

The corrections sheet and the original exam will be turned in within one week. **The test corrections do not raise the grade of the original exam.** It is a grade by itself included under homework.

### **Make-Up Exams**

Exams ***MUST*** be taken on the scheduled date unless ***PRIOR*** arrangements have been made with the instructor. All exams will be made up during Achievement Hour the day you return from your absence or as approved by the instructor. If you miss an exam and cannot take it before the tests are returned to class (usually within 2 class periods), you must take a make-up exam. Your score on the make-up exam will be multiplied by 75%.

### **Cumulative Final**

The final exam is a Comprehensive Common Final Exam and will cover material addressed throughout the semester.

### **Grading Procedure**

40% Tests / Quizzes  
30% Projects / Activities / Test Corrections  
10% Homework  
20% Final (provided a 60% or higher)

A: 90 – 100%  
B: 80 – 89%  
C: 70 – 79%  
D: 60 – 69%  
F: 0-59% or excessive absences

### **Parent and Student Access to Grades**

The school is using Synergy this year as the on-line grading program. Parents and students may access the student's grade at [www.http://qc.apsc.org/pcp](http://qc.apsc.org/pcp).

<b><i>Expectation of Instructor</i></b>	<b><i>Expectation of Students</i></b>
I will do my best to make the course meaningful for every student.	I expect you to be in class on time and not leave early.
I will try hard to plan interesting and useful activities and assignments.	I expect you to read the textbook and study the examples to help you better understand the concepts that we are learning.
I will make sure that the material on quizzes and tests is not a surprise. (However, you may see thing you learned in a different setting.)	I expect you to be prepared for every class by doing the homework assignments and bringing required material.
I will be fair in evaluating your work and give you as much opportunity as possible to do you best work.	I expect you to contact another student in your study group when you are absent to find out your assignments.
I promise to maintain a positive attitude at all times.	I expect you to contact me if you have any problems with the course as soon as the problems begin.
I will begin and end class on time.	I expect you to participate in class activities
I will be in constant communication with you in regards to your studies and grades.	I expect you to be courteous and respectful to me and to you classmates.
I will discuss your grade with you at any convenient time	I expect you to maintain a positive attitude at all times.
I will be courteous and respectful of you.	I expect you to understand the course will be meaningful to you according to your attitude and the effort you put forth.

The mission of the QCHS mathematics department is to facilitate the growth and development of each student as a responsible, independent learner of mathematics, and the applications thereof.

Please sign below indicating that you have read and understand the expectations, content and policies for Ms Morris' Dual Enrollment Pre-Calculus course.

Parent Contact Information:

Student Name (Print) \_\_\_\_\_

Parent / Guardian Name (Print) \_\_\_\_\_

Preferred Contact Phone \_\_\_\_\_

Alternate Contact Phone \_\_\_\_\_

E-Mail Address \_\_\_\_\_

\_\_\_\_\_  
Parent Signature Date

\_\_\_\_\_  
Student Signature Date