MONTGOMERY COLLEGE
DEPARTMENT OF MATHEMATICS
ROCKVILLE CAMPUS
Precalculus MATH165
CRN 40187   Summer 2019

Professor: Fred Katiraie (**fred.katiraie@montgomerycollege.edu**   **Office:** Science Center Room 354P
Website: http://web4students.montgomerycollege.edu/facultyFTPSites/fkatira1/
Classroom: Science Center Room 359   **Phone:** (240) 567-8060
Class Hours: Tuesday and Thursday 6:00 – 9:30 PM
                                            Office Hours: Thursday 4:00 PM to 5:00 PM, and
            Optional Weekly Review Session for Math 150: Wednesday Review Session in SC 358 from 5:00 – 5:50 PM
            Optional Weekly Review Session for Math 165: Thursday Review Session in SC 359 from 5:00 – 5:50 PM

                        My Schedule in Ackerman Learning Center: Monday and Tuesday 4:00 to 5:50 PM

Textbook: PRECALCULUS, Enhanced with Graphing Utilities, 7th Edition, by Sullivan, Sullivan – Prentice Hall, 2013.

MathXL: REQUIRED Access code: MathXL is an online homework and tutorial system.
Notice: that MathXL is not the same as MyMathLab

Materials to buy:
Option 1 – Buy the MathXL code alone (in our bookstore or online) – You will be able to access the electronic book for the class
Option 2 – for just a few more dollars:
GOOD DEAL! Loose Leaf book bundled with the MathXL code – sold in our bookstore for $73.75. ISBN: 9780134589794
Many students prefer (and I also recommend) this option. You need to train yourself to read math books. Also, having a physical book is more practical; navigating the book online is time consuming.

How to Register and Enroll in Your Course

Welcome to MathXL! Your instructor has set up a MathXL course for you.

The course name is: Dr. Katiraie Math 165 Summer 2019

It is based on this textbook: *Sullivan: Precalculus Enhanced with Graphing Utilities, 7e*

To join this course, you need to register for MathXL and then enroll in the course.

1. Registering for MathXL

Before you begin, make sure you have the access code that comes with your MathXL Access Kit.

To register or buy access, go to www.mathxl.com, click the **Student** button in the Register section, and then follow the instructions on the screen.

2. Enrolling in your instructor's course

After registering, log in to MathXL with your username and password. To enroll in this course, enter the following Course ID:

The Course ID for your course is: XL3A-610P-3022-74K2

Need more help? To view a complete set of instructions on registering and enrolling, go to www.mathxl.com and visit the Tours page.

Course Description: This course is intended to prepare students for a science/engineering level course in calculus such as MA 181-182. This preparation includes necessary algebraic skills, comprehension of the general properties of functions, and specific properties of algebraic, trigonometric, logarithmic, and exponential functions. For computation of tuition, this course is equivalent to five semester hours and meets five hours each week; however, MA 180 is a four credit hour course.

Prerequisite: A grade of *C* or better in MATH096 / Math 050 and MATH098, appropriate score on mathematics placement test, or permission from the Mathematics Department is required.

Calculator:
You will be allowed to use calculators, particularly with decimals, percents, and problem solving. This will enable you to concentrate on the process and not get bogged down in the calculations. However, calculators will not be allowed on quizzes and / or tests until after chapter 2 (integers). This will enable you to learn the rules for integers and you will not become dependent on calculators. I would suggest that you purchase a **graphing calculator.** You will be able to use the graphing calculators in your upcoming Mathematics courses. In general, calculators **TI-84** or **TI-84** Plus are preferred; however, TI 85 or TI 86 are also acceptable. TI calculators may be borrowed from the math / science center on a daily basis.
> **No one will be allowed to share a calculator during quizzes and exams.**

Attendance:
You are expected to attend every class, and have your textbook, paper & pencil and calculator with you. Observe that attendance will be considered in your performance in the class. If you miss a class you are responsible for getting the notes and assignments in on time. *I expect you to arrive to class on time.*
Please be aware that you may be dropped if you accumulate absences whose sum is equivalent to more that one week worth of classes. As a result a student may be dropped before or after the college official deadline date for "withdrawals with a W".

Homework Binder:
There are some bad work habits which may hinder one's performance in a course such as this one. As an example, sloppy handwriting often causes careless mistakes that lead to unnecessary confusion and lack of confidence in one's work. In order to ensure that your work for this course is organized, you will be required to have a 3-ring binder (or a folder of your choice) which contains separate sections for:
- Homework assignments
- Quizzes, tests and handouts (such as syllabus)
- Class notes (unless you prefer to keep these in a separate notebook).

The homework assignments should be written neatly and should include only the relevant calculations, not messy scratch work. You should also include the statement of each problem. (For word problems, you can briefly summarize the statement using symbols, if necessary) Keep the various components of the binder file in separate sections (Do not mix your quizzes in with your homework) I will periodically look at your binder and may grade selected problems. (I especially will be interested in seeing your binder when you are not performing well on quizzes and tests.)

Grading Policy:
Your final grade will be based on the following:

HW	50
Quizzes	100
Exam I	150
Exam II	150
Exam III	150
Exam IV	150
Final Exam	250
Homework Binder	Drops One Lowest Quiz
Attendance & Participation	Drops One Lowest Quiz
ALC Center / Review Sessions	Drops One Lowest Quiz
Total Possible Points	**1000**

Grading Scale
900 – 1000 = A
800 – 899 = B
700 - 799 = C
600 – 699 = D
599 and below = F

There will be no make-ups on homework assignments to be turned in, or quizzes.
No make-up exam will be allowed without a well-documented medical excuse.

Supplementary Materials:
The textbook comes with the following supplementary materials that are available in the Math/Science Center. Videotapes are available which are keyed to each section of the text. In addition, MathPro Explorer Tutorial Software is available which not only provides students with problems and interactive guided solutions keyed to each section of the text, but also contains embedded videos of the author working out problems in each section. Arrangements can be made with the math/science center to orient you to this new software.

Final Exam: Thursday, August 1st 7:00 to 9:00 PM **Failure to take the final will result in an F for the course.**

Tutoring Center
Ackerman Learning Center: Free tutoring and other resources are available in ALC located in SW 109.
- **Rockville Campus**, Science West Room 109; phone: 240-567-5200, Hours: Mon. – Thurs. 8am – 8pm, Fri. 8am – 4pm, Sat. 10am – 3pm
http://cms.montgomerycollege.edu/EDU/Department2.aspx?id=27408

Academic Honesty:
Common examples of academic dishonesty and misconduct can be found below and in the Student Code of Conduct, Section IV. If you are in
doubt about what constitutes academic dishonesty, consult your professor or the Student Code of Conduct.

Examples of academic dishonesty include, but are not limited to using "cheat notes" during an exam, copying answers from another student, allowing another person to copy your
work, either inside or outside of class; using work form previous semesters; and copying from a book, magazine, Internet site, or brochure when writing a paper without giving credit
to the source.

Faculty members may impose grade sanctions for violations of academic ethics, normally ranging from a minimum of F on the assignment in which the dishonesty occurred to a
maximum of an F in the course. Faculty members may choose to impose different sanctions. Faculty members also have the prerogative of referring a case to the campus Dean of Student Development with a specific request that the dean consider imposing sanctions.

Homework:
To study
- Read the book and the examples
- Read the notes
- Practice the problems from MXL – show all work on a paper, train yourself to work as it will be required on quizzes and tests
- Practice some more problems from the book – I have given you just a few problems in MXL to help you finish the assignment on time, but those problems are not enough to master the material from the section. It's important to do some more problems from the book
- If you prefer to practice using MathXL, use the STUDY PLAN – select all and access the section you are studying – there are many problems to practice from
- **Some simple topics will be assigned to study on your own and the corresponding assignment will be graded**
- Questions on homework will be discussed at the beginning of each class; however, I recommend you come to my office or to the ALC to clarify your questions.
- **Some problems <u>may</u> be assigned to turn in.** (all these collected problems will average to one quiz grade) **NO SPIRAL PAPER ACCEPTED, <u>neatness required, papers should be stapled!!!!</u>**

Attendance Policy: Attendance will be taken at the beginning of every class. **Three five-minutes tardy will be recorded as 1 absence**.
If you have to leave class early, let me know in advance and indicate ½ day in the attendance sheet. If you have to miss a class, send due-

assignments with a classmate or e-mail them to me. Late assignments will count for ½ its value. **It is your responsibility to find out what you have missed. Please ask one of your fellow classmates for assignments**. To study the missed material**, read the book and/or watch the videos that are in MathXL.**

Tentative Schedule; Quiz Dates are marked asterisk (*)

NO.	***	SEC.	HOMEWORK ASSIGNMENTS	TOPIC
1	*May 28th*	*1.1* *1.2* *1.3* *1.4*		*Distance and Midpoint Formulas* *Rectangular Coordinates; Graphing* *Introduction to Graphing Equations* *Symmetry; Graphing Key Equations* *Solving Equations*
2	*May 30th*	*1.5* *2.1* *2.2* *2.3*		*Cirles* *Lines* *Functions* *Linear Functions and Models* *Properties of Functions*
3*	**June 4th**	**Quiz One** *2.4* *2.5*		*Library of Functions; Piecewise-* *Graphing Techniques: Transformation*
4	*June 6th*	*2.6* *3.1* *3.2* *Review*		*Mathematical Models* *Properties of linear functions,* *Building linear models from data*
5	*June 11th*	**Exam One**	**Chapters 1 and 2**	
6	*June 13th*	*3.3* *3.4* *3.5*		*Quadratic Functions and Their Properties* *Build Quadratic Models* *Inequality Involving Quadratic Functions*
7*	**June 18th**	**Quiz Two** *4.1* *4.2* *4.3* *4.4* *4.5* *4.6* *Review*		*Polynomial Functions and Models* *Polynomial Division, Synthetic Division* *Rational Functions I* *Rational Functions II: Analyzing Graphs* *Polynomial and Rational Inequalities* *The Real Zeros of a Polynomial Function* *Complex Zeros; Fundamental Theorem of Algebra*
8	**June 20th**	**Exam Two** *5.1* *5.2*	**Chapter 3**	*One-to-One Functions; Inverse Functions* *Exponential Functions*
9*	*June 25th* .	**Quiz Three** *5.3* *5.4* *5.5*		*Logarithmic Functions* *Properties of Logarithms* *Logarithmic and Exponential Equations*
10*	**June 27th**	**Quiz Four** *5.6* *5.8*		*Exponential Equations* *Growth and Decay* *Exponential, Logarithmic, and Logistic Models*
11	*July 2nd*	*Review* *6.1* *6.2*		*Angles and Their Measure* *Trigonometric Functions: Unit Circle*

12	July 9th	Exam3 6.3 6.4	Chapters 4 and 5	Properties of the Trigonometric Functions Graphs of the Sin and Cos Functions
13*	July 11th	6.5 Quiz Five 6.6		Graphs of Tan, Cot, Csc, Sec Phase Shifts; Sinusoidal Curve Fitting The Inverse Sin, Cos, and Tan Functions
14*	July 16th	7.1 7.2 Quiz Six		Right Triangle Trigonometry Law of Sines
15	July 18th	7.3		Law of Cosines The Inverse Trig Functions Continued Trigonometric Identities
16*	July 23rd	Quiz Seven 7.4 7.5 7.6		Sum and Difference Formulas Double-Angle and Half-Angle Formulas Trigonometric Equations I
17*	July 25th	Quiz Eight 8.1 8.2 8.3 10.7		Trigonometric Equations II Plane Curves and Parametric Equations
18	July 3oth	Exam 4	Chapters 6, 7, and 8	
19th	August 1st	☺	Thursday August 1st	FINAL EXAM