# MONTGOMERY COLLEGE DEPARTMENT OF MATHEMATICS <br> ROCKVILLE CAMPUS <br> Intermediate Algebra; MATH096 CRN 23240 <br> Fall 2017 

| Professor: | Dr. Fred Katiraie (fred.katiraie@montgomerycollege.edu | Office: Science Center Room 354P |
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| Classroom: | Science Center Room 461 | Phone: (240) 567-8060 |
| Class Hours: | Monday, Wednesday, Friday 12:30 PM to 1:40 PM |  |
| Office Hours: | Tuesdays 1:30 to 2:00 PM, and 6:00 to 6:30 PM, |  |
|  | Thursdays 1:30 to 2:00 PM, Fridays 12:00 noon to $12: 30 \mathrm{PM}$ |  |

Optional Review Sessions for Math 096 Students: Thursdays 5:00-6:00 PM in Ackerman Learning Center (formerly Math Science Center) Room 109

Optional Review Sessions for Calculus I Students: Wednesdays 4:00-6:00 PM in Ackerman Learning Center (formerly Math Science Center) Room 109

Website: http://web4students.montgomerycollege.edu/facultyFTPSites/fkatira1/
Math Club Tutoring Hours in Science Center Room 362: Fridays 3:00 to 5:00 PM.
Course Description: An examination of algebraic skills and concepts intended to prepare students for MATH 130, MATH 150, MATH 165. Algebraic, graphical, numerical, and verbal approaches are used in working with a variety of functions and their applications, including linear, polynomial, exponential, logarithmic, rational, and radical functions. Solve systems of equations.

PREREQUISITE: A grade of C or better in MA 080, (MA094, MA091, MA 091A, or MA 091D); or appropriate score on the mathematics assessment test; or consent of department. Assessment level: RD 120. For computation of tuition, this course is equivalent to four semester hours. Four hours each week.

Text: INTERMEDIATE ALGEBRA, Sixth Edition
By Elayn Martin Gay. It comes with an access code for MathXL.

MathXL REQUIRED - In the bookstore, a new book comes bundled with a MathXL Access code: MathXL is an online homework and tutorial system. You are required to register ASAP. Follow the instructions that come in the booklet or refer to my website for help.

Course name
Math096 Intermediate Algebra, Fall 2017 Dr. Katiraie
The Course ID for your course is:
XL2S-61HY-801Z-90B2

Calculator: A graphing calculator is required for this course. TI-83, TI-83+ or 84 (recommended), TI-82, TI-86 (acceptable). A TI-83+/84 will be used for class demonstrations.
(TI-89, andTI-92 are not acceptable).
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. Lexpect 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 the college official deadline date for "withdrawals with a W".

If you should miss a class, it is your responsibility to find out what you have missed and to read the book to study the material. Please ask one of your fellow classmates for assignments. Do not expect that during my office hours I should summarize for you what you have missed.

Class 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:

- Worksheets,
- Homework assignments
- Quizzes, tests and handouts (such as syllabus )
- Class notes


## Homework:

Do it on a daily basis! This is the way of studying math and it's the only way to master the material.

## Online portion

Register in MathXL and start doing the homework ASAP. There are handouts with instructions on my website. If you still need help, you have to come to my office for training. Please make sure you complete the assignments by the due date. Don't wait until the last minute; MathXL is a way of studying, it shows you solutions to similar problems, and it is like having a tutor at home. You are required to keep a log with the solution to the online homework. Get used to solve problems in an orderly manner showing all the steps.
Label the chapter and section. Start each new assignment on a new page. It will be graded for neatness completeness and organization.

## From the book portion

When you don't have access to the internet practice, do problems from the book. There is a list of suggested problems on the last page. Do more if you have difficulty with the material.
Questions on homework will be discussed at the beginning of each class; however, I recommend that you come to my office (see office hours), or use the Math Science Center to clarify your questions.

Some problems may be assigned to turn in. NO SPIRAL PAPER ACCEPTED, neatness required, papers should be stapled!!!!

## Exams:

There will be four exams. You will be given a zero for every exam missed and NO MAKE UPS will be given. The following applies to students who miss at most 3 classes in the semester
If you do better on the final exam than on your worst test, this test grade will be replaced by your final exam grade.

## Grading Policy:

| 4 Exams (125 points each) | 500 points | $\mathbf{5 0} \%$ |
| :--- | :--- | :--- |
| Quizzes | 150 points | $\mathbf{1 5} \%$ |
| Homework - MathXL | 100 points | $\mathbf{1 0 \%}$ |
| Final Exam | 250 points | $\mathbf{2 5} \%$ |
| TOTAL | 1000 points | $\mathbf{1 0 0 \%}$ |


| Excellent MathXL Homework | With This, You Can Drop Your Lowest Quiz |
| :--- | :--- |
| Attendance \& Participation | With This, You Can Drop Another Lowest Quiz |
| Math Science Center Visits | With This, You Can Drop Yet Another Lowest Quiz |

## Grading Scale

$900-1000=A$
$800-899=B$
700-799 = C
699 And Below $=\mathbf{U}$
Please be advised that on the day of exam/quiz:
I will not provide calculators/pencils.
You will not be permitted to leave the room.
You may not use or even hold a cell phone.
You will not be allowed to share calculators
Make-up Policy: There are NO MAKE UPS for quizzes and exams.

E-mail Communication Statement: MC student e-mail is an official means of communication for Montgomery College. Students are responsible for information and announcements sent via MC e-mail, and it is expected that students check their student e-mail regularly. When e-mailing Dr. Katiraie, please use your MC e-mail account, use proper grammar and punctuation. On the subject indicate your name, last name, class and time of your class.

Ackerman Learning Center: Free tutoring and other resources are available.

- Rockville Campus, Science Center West, Room SW 109, 240-567-5200, Hours: Mon. - Thurs. 8am - 8pm, Fri. 8am - 4pm, Sat. 10am - 3pm http://cms.montgomerycollege.edu/MathScienceCenter/

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- MATH HOMEWORK HELP <br> 093,096,098,110,150,165,181,182,280 <br> Where? Science Center 260 Computer Classroom <br> When? Mondays \& Wednesdays <br> Time? 2:00-4:00 pm
}
- MATH CLUB MEETINGS

Where? Science Center 362
When? Fridays
Time? 3:00-5:00 pm
Why? To Help You Succeed

Accommodations for Students with Disabilities Statement: Disability Support Services (240-567-5058)
Any student who may need an accommodation due to a disability, please make an appointment to see me during my office hour. In order to receive accommodations, a letter from Disability Support Services(R-CB122; G-SA175; or TP-ST120) will be needed. Any student who may need assistance in the event of an emergency evacuation must identify to the Disability Support Services Office; guidelines for emergency evacuations are at: www.montgomerycollege.edu/dss/evacprocedures.htm.

## Academic Regulations \& Student Code of Conduct

All MC students are expected to follow "Academic Regulations" \& "Student Code of Conduct" as described in the MC Student Handbook. These regulations and guidelines can be found at:
www.montgomerycollege.edu/departments/academicevp/Student_PandP.htm

## Inclement Weather

If inclement weather forces the College or any campus or College facility to suspend classes or close, public service announcements will be provided to local radio and television stations as early as possible. You may also call MC at 240-5675000 or check the college website www.montgomerycollege.edu to verify MC school closings. Any exams planned on days classes are suspended will be administered at the first class meeting once classes resume. Note that the Montgomery County Public Schools (MCPS) and Montgomery College do not follow the same school closing procedures.

## Important Student Information Link

In addition to course requirements and objectives that are in this syllabus, Montgomery College has information on its' web site (see link below) to assist you in having a successful experience both inside and outside of the classroom. It is important that you read and understand this information. The link below provides information and other resources to areas that pertain to the following: student behavior (student code of conduct), student e-mail, the tobacco free policy, withdraw and refund dates, disability support services, veteran services, how to access information on delayed openings and closings, how to register for the Montgomery College alert System, and finally, how closings and delays can impact your classes. If you have any questions please bring them to your professor. As rules and regulations change they will be updated and you will be able to access them through the link. If any student would like a written copy of these policies and procedures, the professor would be happy to provide them. By registering for this class and staying in this class, you are indicating that you acknowledge and accept these policies.
http://cms.montgomerycollege.edu/mcsyllabus/

## Course Outcomes:

Montgomery College
MATH 096 Course Outcomes

| $\#$ | Outcome: Upon completion of this course a student will be able to: |
| :--- | :--- |
| 1 | Define functions verbally, numerically, graphically and algebraically. |
| 2 | Use the numerical or graphical representation of a relation to determine whether the relation is a function. |
| 3 | Identify the domain and range of a given function in both interval notation and set-builder notation. |
| 4 | Understand the relationship between a function and its inverse in terms of domains, ranges, and graphs. |
| 5 | Find an inverse of linear, exponential, and logarithmic functions. |
| 6 | Identify whether a function given symbolically is linear, quadratic, radical, exponential, or logarithmic. |
| 7 | Identify linear, quadratic, exponential, and logarithmic functions, and systems of equations from their graphs. |
| 8 | Solve linear, quadratic, rational, exponential, and simple radical equations, as well as systems of equations. |
| 9 | Simplify rational, radical, exponential, and simple logarithmic expressions using appropriate properties. |
| 10 | Graph linear, quadratic, exponential, and logarithmic functions, and systems of equations. |
| 11 | Find and identify the vertex, axis of symmetry, minimum or maximum, x-intercepts, and y-intercept of a quadratic <br> function from its symbolic representation or its graph. |
| 12 | Model real world applications using linear, quadratic, rational, logarithmic, exponential functions, and systems of <br> linear equations. |
| 13 | Use a graphing calculator to enter and graph linear, quadratic, radical, exponential, and logarithmic functions, and <br> systems of equations and interpret and analyze the graph. |

## TENTATIVE SCHEDULE - This schedule may be subject to change

August 28
August 30
September 1
September 6 September 8

September 11
September 13
September 15
September 18
September 20
September 22
September 25
September 27
September 29
October 2
October 4
October 6

October 9
October 11
October 13

October 16
October 18
October 20
October 23
October 25
October 27
October 30
November 1
November 3
November 6
November 8
November 10

November 13
November 15
November 17

November 20

November 27
November 29
December 1

December 4
December 6
December 8
(2.1-2.3 optional), 2.4 Interval Notation
2.5 three part inequality only, 2.6
2.7, and Quiz 1

Appendix D, and Significant Digits, 3.1
3.2, Quiz 2
3.3, 3.4, 3.5

Review for Exam 1
Exam 1 on chapters 2 \& 3
4.1, 4.2, 4.3,
5.1, 5.2, 5.3,
5.4, Quiz 3
5.5, 5.6, 5.7
5.8,

Review and Quiz 4
9.1, 9.2,

Review for Exam 2
Exam 2 on chapters 4, and 5, and 25 points from materials on your Exam 1
9.3, 9.4,
9.5, 9.6

Review and Quiz 5
9.7, 9.8
9.8

Review and Quiz 6
6.1, 6.2,
6.3, and Review for Exam 3

Exam 3 on chapter 9, and 25 points from materials on your Exam 2
6.5, 6.6,
7.1, 7.2
7.3, 7.4
7.5, 7.6,
7.7, 7.8

Review and Quiz 7
8.1, 8.2,
8.3, 8.4,

Review and Quiz 8
8.5, 8.6

November 22 ${ }^{\text {nd }}$ - November 26 ${ }^{\text {th }}$ Thanksgiving Break ㅇㅇ;();();();
10.3,

Review, Quiz 9
Exam 4 (chapters 6, 7, 8, and 10.3), and 25 points from materials on your Exam 3

Review for Final Exam
Review for Final Exam
Review for Final Exam

## Final Exam:

The final exam is comprehensive over all material. Failure to take the final will result in a grade of U for the course The Final Exam will be on Monday December 11 ${ }^{\text {th }} \mathbf{1 2 : 3 0}$ PM to 2:30 PM
The instructor reserves the right to amend this syllabus as appropriate throughout the semester. Students will be notified of any such changes.

## 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: Math 096 Intermediate Algebra Dr. Katiraie Fall 2017
It is based on this textbook: Martin-Gay: Intermediate Algebra, $6 e$
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: XL2S-61HY-801Z-90B2

## Need more help?

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

