Mat 161 YO - Precalculus – 4 credits
FALL 2008

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Homework Web Site: http://www.eduspace.com

CATALOGUE DESCRIPTION: A comprehensive precalculus course which extends the material taught in MAT 100. Additional topics include: quadratic and absolute value, inequalities, binomial theorem, sigma notation, conic sections, theory of equations and complex numbers. A graphing calculator is required for class, homework, and testing.

PREREQUISITES: MAT 100 with a minimum grade of "C" or consent of instructor.

LEARNING GOALS:
Upon completing this course, students should have the following knowledge and skills, specifically be able to:
1. graph linear, quadratic, and other algebraic functions with and without the use of a graphics calculator.
2. use rigid and nonrigid transformations to graph functions.
3. find combinations and compositions of functions.
4. determine if a function is one-to-one and if so, to find its inverse.
5. write and use mathematical models to solve real-life problems.
6. find intercepts, zeros, and solutions of equations graphically.
7. solve linear, quadratic, and polynomial equations and equations involving radicals, fractions, and absolute values algebraically.
8. solve linear, polynomial, and rational inequalities, and inequalities involving absolute value.
9. sketch and analyze graphs of quadratic and polynomial functions.
10. find the zeros of polynomial functions.
11. determine the domains, find the asymptotes and sketch the graphs of rational functions.
12. recognize, graph, and write equations of conics with vertex or center at the origin.
13. recognize, graph, and write equations of conics that have been shifted vertically and/or horizontally in the plane.
14. use sequence, factorial, and summation notation to write the terms and sums of sequences.
15. use the Binomial Theorem to calculate binomial coefficients and write binomial expansions.
16. solve systems of equations by substitution, by elimination, graphically, and by using inverse matrices.


REQUIRED MATERIALS: A TI-84 or TI-83 Plus graphing calculator.

GRAPHING CALCULATOR HANDOUT: An Introduction to the TI-84 Plus Calculator is on Dr Hofmann’s web page: This website was developed a few years ago but is still beneficial. It will give you a good lesson on the use of the calculator: [http://faculty.mc3.edu/rhofman/GeneralClass/STWKFall01.htm](http://faculty.mc3.edu/rhofman/GeneralClass/STWKFall01.htm). You can download it and work through the examples with your calculator in hand.

EXAMS:
You will be required to come to the Blue Bell Campus or West campus twice during the semester, once to take test 2 and a second time to take the final exam. (If you live out of state, other arrangements can be made.) Both supervised tests must be taken at the Testing Center, College Hall Room 129 at Montgomery County Community College, Blue Bell Campus or West Campus. It is your responsibility to schedule the time for these tests either by email:

Blue Bell Campus
College Hall, Lower Level
Room 129
testing@mc3.edu - Course Testing
placementtesting@mc3.edu - Placement Testing
215-641-6646

Pottstown Campus
South Hall
Room 161
westtesting@mc3.edu
610-718-1906

HOMEWORK:
Homework Assignments are provided at the Houghton Mifflin publisher's site. Go to [http://www.eduspace.com](http://www.eduspace.com). You will need to register the first time; the detailed directions are given in another document. After you have registered (only done once), and are at the Larson’s site: [http://www.eduspace.com](http://www.eduspace.com), select “Do Homework” button.
Homework assignments are listed with due dates.
Course ID:

**GRADING:**
Tests 400 points  
Quizzes 100 points  
Homework 175 points  
Final Exam: 250 points

Total points: 925

**MAKEUP EXAM POLICY:** a makeup exam will **NOT** be given under any circumstances.

**WITHDRAWAL:** Requests for grades of W will be denied after the Last Day of Scheduled Classes. No withdrawal forms will be signed during the designated final exam period.

**LEARNING ASSISTANCE LAB**
The Learning Assistance Lab (LAL) provide academic support services for students taking classes at the college. These services include face-to-face and on-line tutoring, study skills and writing workshops, computer assistance, and more. All services are free to students.  [http://www.mc3.edu/aa/lal/lal_main.html](http://www.mc3.edu/aa/lal/lal_main.html)

**ACCOMMODATIONS**
Students with disabilities may be eligible for accommodations in this course. Please contact the Director of Services for Students with Disabilities in College Hall 131 at (215) 641-6575 or 6574 for more information. At the West Campus, contact the Coordinator of Disability Services in the Student Development Center at 610-718-1853.  [http://www.mc3.edu/sa/stdisab/stdisab.htm](http://www.mc3.edu/sa/stdisab/stdisab.htm)

**CODE OF ETHICS:** Montgomery County Community College has established an Academic Code of Ethics. It is important that you read this document. Realize that violations of this code of ethics will be indicated on your MCCC transcript.  
Go to the following web site:  

After you have read the Academic Code of Ethics, please copy and sign the following statement.

I have read the Academic Code of Ethics and fully understand the policy and the consequences. I realize that violations of this code of ethics will be indicated on my MCCC transcript.  
Your printed name
Mat 161 Course Time Line – FALL 2008

Plan ahead; technology cannot be trusted; the unwritten well known theorem for online courses:

**Technology will certainly fail when there is no slack time before the deadline!**

Quizzes and tests are due Wednesday. Late quizzes and tests count as zero.

This is a fifteen-week course. You will need to stay on top of it. I require material to be sent twice a week, but for most students it is better to do some each day.

Be aware that you should do the homework before taking the quizzes and tests.

Homework done online using [www.eduspace.com](http://www.eduspace.com) is due Saturday. Late homework counts as zero.

There are **two tests which must be taken at MCCC’s Testing Center**: Test 2 and the Final Exam.

The following are deadlines. You can always work ahead and send homework, quizzes and tests EARLY. Late is not acceptable.

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Due Date</th>
<th>Requirements</th>
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</table>
| 9/3      | Wednesday| 1. Link your MCCC’s email address with the email you read regularly. Directions given in BlackBoard.  
2. Go to the discussion board and share information about yourself with others in the class.  
3. Send me your signed code of ethics by fax or US mail.  
5. Install necessary software from Houghton Mifflin site ([www.eduspace.com](http://www.eduspace.com)) to do homework online. Course I: |
| 9/6      | Saturday | Homework on chapter 1.1, 1.2, P1, P2 (Home1)  
Go to Houghton site to do graded homework  
[www.eduspace.com](http://www.eduspace.com)  
Course I: |
<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>9/10</td>
<td>Wednesday</td>
<td>Quiz 1</td>
</tr>
<tr>
<td>9/13</td>
<td>Saturday</td>
<td>Homework on 1.3, 1.4, P3, P4 (Home2)</td>
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<tr>
<td>9/17</td>
<td>Wednesday</td>
<td>Quiz 2</td>
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<tr>
<td>9/20</td>
<td>Saturday</td>
<td>Homework on 1.5, P5, P6 (Home3)</td>
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<tr>
<td>9/24</td>
<td>Wednesday</td>
<td>Quiz 3</td>
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<tr>
<td>9/27</td>
<td>Saturday</td>
<td>Homework on 1.6, 1.7 (Home4)</td>
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<tr>
<td>10/1</td>
<td>Wednesday</td>
<td>Test 1</td>
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<tr>
<td>10/4</td>
<td>Saturday</td>
<td>Homework on 2.1, 2.2, 2.3 (Home5)</td>
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<tr>
<td>10/8</td>
<td>Wednesday</td>
<td>Take Quiz 4</td>
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<td>10/11</td>
<td>Saturday</td>
<td>Homework on 2.4, 2.5, 2.6 (Home6)</td>
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<tr>
<td>10/15</td>
<td>Wednesday</td>
<td>Take Quiz 5</td>
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<td>10/18</td>
<td>Saturday</td>
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<tr>
<td>10/22</td>
<td>Wednesday</td>
<td><strong>Test 2 must be taken at Blue Bell Testing Center</strong></td>
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<tr>
<td>10/25</td>
<td>Saturday</td>
<td>Homework on 3.1, 3.2 (Home7)</td>
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<td>10/29</td>
<td>Wednesday</td>
<td>Quiz 6</td>
</tr>
<tr>
<td>11/1</td>
<td>Saturday</td>
<td>Homework on 3.3, 3.4 (Home8)</td>
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<tr>
<td>11/5</td>
<td>Wednesday</td>
<td>Quiz 7</td>
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<tr>
<td>11/8</td>
<td>Saturday</td>
<td>Homework on 3.5, 3.6 (Home9)</td>
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<tr>
<td>11/12</td>
<td>Wednesday</td>
<td>Test 3</td>
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<tr>
<td>11/15</td>
<td>Saturday</td>
<td>Homework on 10.1, 10.2, 10.3 (Home 10)</td>
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<td>11/19</td>
<td>Wednesday</td>
<td>Quiz 8</td>
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<tr>
<td>11/22</td>
<td>Saturday</td>
<td>Homework on 9.1, 9.5 (Home11)</td>
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<td>11/26</td>
<td>Wednesday</td>
<td>Quiz 9</td>
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<tr>
<td>11/29</td>
<td>Saturday</td>
<td>Homework on 8.1, 8.2, 8.3, 8.6 (Home12)</td>
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<td>12/3</td>
<td>Wednesday</td>
<td>Quiz 10</td>
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<tr>
<td>12/10</td>
<td>***Wednesday</td>
<td>Test 4</td>
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<tr>
<td>5/15</td>
<td>Thursday</td>
<td><strong>Final exam must be taken on or before ,December 15, 2008 at either Main or Pottstown campus.</strong></td>
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No break is scheduled. You can take your break whenever as long as you meet the due dates.

**HOMEWORK ASSIGNMENTS FROM TEXTBOOK – Larson’s PreCalculus: A Graphing Approach**

**NOTE Larson’s Algebra and Trigonometry-Precalculus 5th edition is the same book.**


**MECHANICS**
You will be working with three components:
1. Textbook
2. MCCC’s BlackBoard site which has quizzes, tests, lecture notes, PowerPoint slides, animated flash modules, worksheets, worked out examples captured using Screenwatch software, audio and screen captures of face-to-face class sessions.
3. Eduspace which has your homework assignments which you must use. The following course code is needed to enroll in this course homework site. Students need both this course code and a passkey (formerly registration code) from the

Student Getting Started with Eduspace Guide:
   Course ID
Many other resources are available for you at this site. Feel free to use them. However, the quizzes and tests are on MCCC’s BlackBoard site. The quizzes and tests will need to be faxed (215-619-7198) or scanned and emailed to me.

HOMEWORK
1. Homework is due every week.
2. Homework assignments are found and worked on in Eduspace.
3. Due Dates (in course information folder), Quizzes and TESTS (in chapters folders within document folder) are in MCCC’s Blackboard folders.
4. Homework in Eduspace cannot be accessed after 11:00PM on the duedate
5. Quizzes and Tests found in MCCC’s BlackBoard site are due at 11:00 PM on the duedate.