MAT-1033: Intermediate Algebra  
*Contributed by Professor Mario Toussaint*


Additional items (available for purchase in any BC bookstore) that will be needed are: pencils and pens for writing information, a 3-ring binder specifically for doing Math work/calculations, scantrons for exams and quizzes, graph paper (quad ruled or 4mm grid), the ALEKS access card.

**Course Description:** A course designed for students with strong arithmetic skills (without requiring a calculator) and an algebra background; including solving linear equations in one variable and factoring polynomials. This course will extend students’ algebra skills to include solving radical, rational, quadratic, & absolute-value equations, and recognizing relationships between radical expressions and rational exponents. Complex numbers are introduced in this course as well. Problem solving involving real-life scenarios is an integral part of this course. In this course, students will enhance their problem-solving abilities and their ability to communicate concepts of algebra in the language of mathematics, both orally and written.

**Calculator Policy:** A scientific calculator such as the TI-30X IIS or the TI-36Xa will be permitted on all tests and the final exam. All graphing calculators and scientific calculators that can store formulas or solve equations, such as the Casio FX-115MS and the Casio FX-115W, are not permitted on any quiz, test, or on the final exam. The use of any mobile device and or graphing calculator is not permitted on any quiz, test, or on the final exam. Use of any of the aforementioned banned calculators on quizzes, tests, or on the final exam will be considered academic dishonesty, and may result in consequences such as a grade of zero on the quiz, test, or final exam, referral to the Office of Student Affairs for counseling, academic probation, or expulsion from Broward College. (See the Broward College student code of conduct for details.) Sharing a calculator with another student during a quiz, test, or during the final exam is also considered academic dishonesty on the part of all students involved. If you’re not sure whether your calculator will be permitted, please ask the instructor.

**Prerequisite:** Successful completion of MAT-0028 or permission of the mathematics department.

**Class Format:** I will spend the first fifteen of the class answering questions from the previous lesson. This will be followed by about sixty minutes of discussion of the material scheduled for that day. There will be five quizzes online or in class. **Each quiz will be worth ten points.**

**Attendance Policy:**
- A maximum of two undocumented absences will be allowed.
- An absence for a religious observance will not count against you if you let the instructor know **at least one week in advance.**
- Per college policy proper documentation will be required for all other absences (please see college catalog).
- If you are more than **ten minutes** late for class, it will count as **one absence.**
- **It is your responsibility to make sure you sign the attendance sheet by 6:45 PM.**
- Five points may be deducted from your next test score if you leave class before dismissal.
- If you have more than 2 absences prior to the withdrawal date, you may be administratively withdrawn from the class and receive a “W” or, if it is your third attempt an “F”.
- If you have more than 2 absences after the withdrawal date, you may receive a “WF” that will then be computed as an “F” in your GPA.
- **The withdrawal deadline is March 23rd, 2015.**
- If you miss a class, it is your responsibility to catch up with the material covered that day.

**Assistance:** During Office hours, you are welcome to come in and ask me questions about concepts covered in class or if you are stuck with a homework problem. If you can’t make it to the office, e-mail me your question and I will try my best to reply within twenty-four hours. I will answer your emails on MWF between 8 PM and 9 PM and TR between 5 PM and 6 PM. I will be unavailable to answer emails starting Fridays at 9 PM until Monday at 8 PM.
Also, you can find online help through “Smarthinking”. To access Smarthinking, go to www.broward.edu, sign in to MYBC, and click on Smarthinking.

**Homework and quizzes:** You will be assigned practice homework at the end of each class to help you master the material covered. You must turn in the homework by the due date using the educational software titled ALEKS360. The due date for the homework will be posted online. **No late homework will be accepted. You can earn up to 100 points towards your final course grade for completing all the homework assignments with a perfect score. If you do not attempt to complete an assignment by the deadline, you will receive a zero for that assignment. Also, there will be ten in-class quizzes worth ten points each for a total of 100 points. The dates for the quizzes will be posted online. The overall average showing in ALEKS360 will not constitute your average in the course, your official course average will be posted in D2L. The details on how to access ALEKS360 will be given in class.**

**Mathematics Lab:** This is an open lab that exists for all students. Attendance is not required for this class; however I strongly recommend you use the Math Lab to study. It is located in the library room 217; there are tutors available as well as study materials to help you succeed in this class.

**Behavior:** Professional behavior is expected. Please turn off all beepers and cell phones before entering the classroom. **Plagiarism or cheating of any form as well as using profanity will be cause for immediate removal from this class and referral of the incident to the chair of the Math department and/or the dean of student affairs for further actions.** No food or drinks and no gum chewing allowed. Five points may be deducted from your next test score if your cell phone goes off, if you are texting, if you are using a laptop computer without the instructor’s permission, and if you pop your gum during class. Possible consequences for any disruptive behavior include a failing grade for the class as well as reference of the incident to the dean of student affairs for further actions. You are required to bring your BC photo ID to every class meeting; you may be asked to present your ID at any time.

**Withdrawal Policy:** The College’s policy states that instructors may not give W’s or incompletes just because students are not passing the class. It is your responsibility to withdraw from the course by the deadline. The last day to withdraw is **March 15th, 2015.** Also, the instructor may not place a student into an “audit” status. If you wish to change from credit to audit, you must do so through the registrar’s office by March 15th, 2015. If you simply stop attending class without formally withdrawing from the course, you may receive a grade of “F”. By state law, you can be enrolled in this class a total of three times. The third time you will pay out of state tuition.

**Class participation (total 50 points):**

You will earn two points per class meeting towards your final grade up to a maximum of twenty points.

- To qualify for the points, you must come to class on time and sign the attendance sheet.
- You must follow the instructions given by the instructor.
- You must solve all the problems presented by the instructor completely and correctly.
- You must not be texting, sleeping, or engaging in conversation unrelated to the topic under consideration.

You will earn a maximum of 30 points total your final grade for taking notes during class

To qualify for the points you must do the following:

- Bring a 3-ring binder only, paper, pens, pencils and your book to class.
- Take notes when instructed to do so and when the instructor solves problems on the board.
- The date of each class meeting must be written with a pen.
- The instructor will deduct 4 points every time you miss a class regardless of the reason for the absence.
- The binder will be inspected twice during the semester.

**Exams:** Four tests will be given throughout the semester. Each test will be worth a **maximum of 100 points.** Also, there will be a cumulative final exam at the end of the semester. **The final exam is mandatory and will be worth 200 points.**

**There will be one make-up test at the end of the semester.** If your grade for the make-up is higher than your lowest test score, I will replace the lowest of the four test scores with the make-up exam score. Also, if you miss a test for a documented medical emergency, your make-up exam score will replace that test. In each case I will only do this one time during the entire semester. The make-up exam will be cumulative and will cover everything covered in the class. **Test scores will not be curved.** If you do not take the final exam, your grade for the entire class may be an “F”. All your graded tests will be returned to you within one week, you must keep them until at least the end of the semester. You will
need to show your graded tests to the instructor if you think the wrong grade was recorded for a test. During tests and quizzes, you must remain in your seat for the entire time until you return the test to the instructor. If you leave the classroom during a test without completing the test, you will not be allowed to return and finish the test. Please check the calendar below and the D2L calendar for tests and quizzes dates and times.

**Final Grades:**

To calculate your final grade, I will add the four test scores, the final exam score, the homework points, the quizzes, and the class participation points. This total will be divided by 8.5 to get your average.

\[(T1 + T2 + T3 + T4 + \text{homework} + \text{quizzes} + \text{Class Participation} + \text{Final Exam}) \div (8.5) = \text{Average.}\]

<table>
<thead>
<tr>
<th>Assessment type</th>
<th>Total number of points</th>
<th>Percent of final course grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests (4 @ 100 each)</td>
<td>400</td>
<td>47 %</td>
</tr>
<tr>
<td>Homework</td>
<td>100</td>
<td>11.5 %</td>
</tr>
<tr>
<td>Quizzes</td>
<td>100</td>
<td>11.5 %</td>
</tr>
<tr>
<td>Class participation</td>
<td>50</td>
<td>6 %</td>
</tr>
<tr>
<td>Final Exam</td>
<td>200</td>
<td>24 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
<td></td>
</tr>
</tbody>
</table>

If your average is your letter grade is

- 89.5 To 100 %--------------------------A
- 79.5 To 89.49%--------------------------B
- 69.5 To 79.49%--------------------------C
- 59.5 To 69.49%--------------------------D
- 59.49 % and below-----------------------F

**Tentative Schedule:**

<table>
<thead>
<tr>
<th>Week</th>
<th>Notes</th>
<th>Tentative Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Syllabus and 2.1</td>
<td>2.2</td>
</tr>
<tr>
<td>2</td>
<td>Test # 1</td>
<td>3.1 &amp; 3.2</td>
</tr>
<tr>
<td>3</td>
<td>Test # 1</td>
<td>3.1 &amp; 3.2</td>
</tr>
<tr>
<td>4</td>
<td>Test # 2</td>
<td>4.5 &amp; 4.6</td>
</tr>
<tr>
<td>5</td>
<td>5.1 &amp; 5.2</td>
<td>5.3</td>
</tr>
<tr>
<td>6</td>
<td>5.4</td>
<td>5.5</td>
</tr>
<tr>
<td>7</td>
<td>No Class</td>
<td>No Class</td>
</tr>
<tr>
<td>8</td>
<td>Test # 3</td>
<td>6.1 &amp; 6.2</td>
</tr>
<tr>
<td>9</td>
<td>6.3</td>
<td>6.4</td>
</tr>
</tbody>
</table>
**CRITICAL THINKING**

This class will use the language and concepts of Critical Thinking to enhance learning, both in general and in the specific area of application problems.

**Broward College’s Definition of Critical Thinking:**
To support Broward College’s Quality Enhancement Plan (QEP), critical thinking is defined as a process of evaluating information by questioning and testing assumptions, accepting and rejecting arguments and/or perspectives, and applying reasoning to make informed decisions.

**Critical Thinking Learning Outcomes:**
*Students will be able to:*
1. Analyze and interpret relevant information
2. Explain questions, problems, and/or issues
3. Evaluate information to determine potential conclusions
4. Generate a well-reasoned conclusion

**Critical Thinking Learning Experiences Grid:**

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Activities/Assignments</th>
<th>Elements of Thought</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. Analyze and interpret relevant information</td>
<td>Sections: 2.1, 2.4, 3.4, 4.8, 7.1, 7.2 Homework Assignments <strong>Quiz # 1 on 2.1 &amp; 2.2</strong></td>
<td>Purposes, Information</td>
</tr>
<tr>
<td>1.2. Explain questions, problems, and/or issues</td>
<td>Sections: 2.1, 2.4, 3.4, 4.8, 7.1, 7.2 Homework Assignments <strong>Quiz # 2 on 3.4</strong></td>
<td>Questions, Concepts</td>
</tr>
<tr>
<td>1.3. Evaluate information to determine potential conclusions</td>
<td>Sections: 2.1, 2.4, 3.4, 4.8, 7.1, 7.2 Homework Assignments <strong>Quiz # 3 on 4.8</strong></td>
<td>Assumptions, Points of View</td>
</tr>
<tr>
<td>1.4. Generate a well-reasoned conclusion</td>
<td>Sections: 2.1, 2.4, 3.4, 4.8, 7.1, 7.2 Homework Assignments <strong>Quiz # 4 on 7.1 &amp; 7.2</strong></td>
<td>Inferences, Implications</td>
</tr>
</tbody>
</table>

**Quiz # 5**
**Quiz # 5 on 2.1, 4.8, & 7.2**
Critical Thinking Resources/References:

- The Critical Thinking Community: College and University Students
- The Critical Thinking Community: Critical Thinking in Every Day Life: 9 Strategies