Course Description
Review of basic algebra and trigonometry with emphasis placed on skills and concepts needed in the calculus sequence. Includes study of polynomial, exponential, logarithmic, and trigonometric functions. Introduces sequences and series.

This is a fully online, eight-week course. We will not meet face-to-face at any time.

Course Prerequisites
MAT-10443 Intermediate College Algebra or consent of instructor.

Course Objectives
Upon successful completion of this course, students will be able to:
1. Construct and interpret graphs of functions.
2. Apply polynomial, trigonometric and exponential functions to various types of problem solving.
3. Recognize and use complex numbers and analytic geometry.
4. Solve systems of equations and evaluate series.
5. Solve real-world problems using the tools of pre-calculus and algebra.
6. Evaluate the difference quotient and limits.

Required Text

ISBN: 9780495108337

Course Assignment Descriptions
You will have several opportunities to demonstrate your knowledge and understanding of the principles taught in this course. The primary means of evaluating your work will be through practical application of the material. In the event that you have difficulty completing any of the assignments for this course, please contact your instructor immediately. Please refer to the Weekly Materials section of the cyberclassroom for complete details regarding the activities and assignments for this course. The following is merely a summary.
Discussion contributions (80 points)  
(three to six postings per week @ 10 points per week)

Initial Substantive Posts: Submit an initial response to each of the prompts provided each week by your instructor. Your initial post should be substantive (approximately ½ of a page in length) and must be posted by midnight, Central Time by Wednesday of each week. In your substantive post you are encouraged to use references (you may use your textbook); show evidence of critical thinking as it applies to the concepts or prompt and/or use examples of the application of the concepts to work and life. Proper punctuation, grammar and correct spelling are expected. Please use the spell-check function.

Required Replies: You must reply to at least two different peers per prompt. Your replies should build on the concept discussed, offer a question to consider, or add a differing perspective, etc. Rather than responding with, “Good post,” explain why the post is “good” (why it is important, useful, insightful, etc.). Or, if you disagree, respectfully share your alternative perspective. Just saying “I agree” or “Good idea” is not sufficient for the posts you would like graded.

Posting Guidelines: Overall, postings must be submitted on at least two separate days of the week. It is strongly recommended you visit the discussion forum throughout the week to read and respond to your peers’ postings. You are encouraged to post more than the required number of replies.

(Please review the Policies section of Blackboard for further details.)

Weekly Assignments (8 @ 30 points each = 240 points)
Complete selected problems from your text, and submit your answers along with the work you have done to arrive at those answers in Blackboard. You can type your answers and work in a Word document, however, it may be easier to hand write them and scan your document in order to submit it electronically. Please keep in mind that full credit will only be earned if you show the work necessary to complete the problems.

Midterm Exam (72 points)
During Week 4 you will be completing a midterm exam. This exam will open for you on Thursday of Week 4 and must be completed by Sunday of that week. There is no time limit to complete the exam, as long as it has been submitted by Sunday. You must show all of your work to earn full credit for solving each problem. Each problem will be worth up to 12 points, with the scoring breakdown as follows:
- 0 out of 12 points – No demonstration of understanding of concept
- 3 out of 12 points – Using the correct formula or basic idea
- 6 out of 12 points – Correct Procedure started, indicating partial understanding
- 9 out of 12 points – Minor mistakes while demonstrating substantial grasp of concept
- 12 out of 12 points – Correct execution of problem, demonstrating correct underlying reasoning, accurate solution

Final Exam (72 points)
During Week 8 you will be completing a final exam. This exam will open for you on Thursday of Week 8 and must be completed by Saturday of that week. There is no
time limit to complete the exam, as long as it has been submitted by Saturday. You must show all of your work to earn full credit for solving each problem. Each problem will be worth up to 12 points, with the scoring breakdown as follows:
- 0 out of 12 points – No demonstration of understanding of concept
- 3 out of 12 points – Using the correct formula or basic idea
- 6 out of 12 points – Correct Procedure started, indicating partial understanding
- 9 out of 12 points – Minor mistakes while demonstrating substantial grasp of concept
- 12 out of 12 points – Correct execution of problem, demonstrating correct underlying reasoning, accurate solution

**Course Schedule At-A-Glance***

Please refer to the Term Calendar in our cyberclassroom for specifics regarding dates.

<table>
<thead>
<tr>
<th>Week</th>
<th>Readings &amp; Activities</th>
<th>Assignments Due</th>
<th>Date/Time Due**</th>
</tr>
</thead>
</table>
| Week 1 | • Chapter 1: Basics  
• Chapter 2: Graphs and Technology  
• Chapter 3: Functions and Graphs (sections 3.1-3.4) | • Course Discussion  
• Week 1 Assignment | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 2 | • Chapter 3: Functions and Graphs (sections 3.5-3.7)  
• Chapter 4: Polynomial and Rational Functions | • Course Discussion  
• Week 2 Assignment | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 3 | • Chapter 5: Exponential and Logarithmic Functions | • Course Discussion  
• Week 3 Assignment | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 4 | • Chapter 6: Trigonometric Functions  
• Chapter 7: Trigonometric Identities and Equations | • Course Discussion  
• Week 4 Assignment  
• Midterm Exam | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 5 | • Chapter 8: Triangle Trigonometry  
• Chapter 9: Applications of Trigonometry | • Course Discussion  
• Week 5 Assignment | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 6 | • Chapter 10: Analytic Geometry  
• Chapter 11: Systems of Equations | • Course Discussion  
• Week 6 Assignment | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 7 | • Chapter 12: Analytic Geometry | • Course Discussion  
• Week 7 Assignment | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 8 | • Chapter 13: Limits and Continuity | • Course Discussion  
• Week 8 Assignment  
• Final Exam | • Midnight CT on Weds/Sat.  
• Saturday at midnight  
• Saturday at midnight |

* All online weeks run from Monday to Sunday, except the last week, which ends on Saturday.
  ** All assignments are due at midnight Central Time. (All submissions to the Blackboard system are date/time stamped in Central Time).
Assignments At-A-Glance

<table>
<thead>
<tr>
<th>Assignment/Activity</th>
<th>Qty.</th>
<th>Points</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weeks 1-8: Discussion</td>
<td>-</td>
<td>10 per week</td>
<td>80</td>
</tr>
<tr>
<td>Weeks 1-8: Weekly Assignments</td>
<td>8</td>
<td>30</td>
<td>240</td>
</tr>
<tr>
<td>Week 4: Midterm Exam</td>
<td>1</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Week 8: Final Exam</td>
<td>1</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td><strong>TOTAL POINTS</strong></td>
<td></td>
<td></td>
<td><strong>464</strong></td>
</tr>
</tbody>
</table>

*Please refer to the Policies menu for more information about our Course Discussions.

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 to 100%</td>
<td>417-464</td>
</tr>
<tr>
<td>B</td>
<td>80 to 89%</td>
<td>371-416</td>
</tr>
<tr>
<td>C</td>
<td>70 to 79%</td>
<td>324-370</td>
</tr>
<tr>
<td>D</td>
<td>60 to 69%</td>
<td>278-323</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60%</td>
<td>&lt; 278</td>
</tr>
</tbody>
</table>

To access your scores, click on Grades in the Student Tools area in Blackboard.

**Important Policies**

All course-specific policies for this course are spelled out here in this syllabus. However, additional university policies are located in the Policies section of Blackboard. You are responsible for reading and understanding all of these policies. All of them are important. Failure to understand or abide by them could have negative consequences for your experience in this course.

**Editorial Format for Written Papers**

All written assignments are to follow the APA writing style guidelines for grammar, spelling, and punctuation. This online course includes information regarding the APA style under “Writing and Research Resources” in the Resource Room on the course menu in Blackboard.

**Ottawa Online Late Policy**

With instructor approval, assignments may be accepted for up to one week after the due date, but a minimum automatic deduction of 10% of the points will be assessed. The instructor also has the option of increasing this deduction percentage up to a maximum of 20%. Extenuating circumstances may be determined on rare occasions and an extension allowed without a deduction, but only at the sole discretion of the instructor.

Discussion board postings will not be accepted for credit when posted after the close of the discussion week. There are no exceptions to this rule; however, solely at the discretion of the instructor, the student may be allowed to submit an alternative assignment to make up for the points under extenuating circumstances. If granted, this should be an exception to the rule.

No assignments will be accepted after the last day of the course (end of term) unless arrangements have been made and “approved” by the instructor at least one week in advance.
Saving Work
It is recommended that you save all of your work from this course on your own computer or flash drive. The capstone course you take at the end of your program may require you to have access to this work for culminating assignments and/or reflections.

Academic Integrity
Plagiarism and cheating will not be tolerated at any level on any assignment. The reality of cyberspace has made academic dishonesty even more tempting for some, but be advised that technology can and will be used to help uncover those engaging in deception. If you ever have a question about the legitimacy of a source or a procedure you are considering using, ask your instructor. As the University Academic Council approved on May 29, 2003, “The penalty for plagiarism or any other form of academic dishonesty will be failure in the course in which the academic dishonesty occurred. Students who commit academic dishonesty can be dismissed from the university by the provost/director.”
Please refer to Academic Honesty in the Policies section of the online course menu for important information about Ottawa University’s policies regarding plagiarism and cheating, including examples and explanations of these issues.

Student Handbook
Please refer to your student handbook for all university regulations. The Resource Room on the course menu in Blackboard contains information about where to find the student handbook online for your campus.

Please see Policies in Blackboard for additional university policies.

Blackboard Technical Support
The Resource Room in Blackboard contains links to student tutorials for learning to use Blackboard as well as information about whom to contact for technical support. Ottawa University offers technical support from 8 a.m. to midnight Central Time for all students, staff, and faculty at no cost. See www.ottawa.edu/ouhelp for contact information.

Ottawa University Mission Statement
The mission of Ottawa University is to provide the highest quality liberal arts and professional education in a caring, Christ-centered community of grace which integrates faith, learning and life. The University serves students of traditional age, adult learners and organizations through undergraduate and graduate programs.