

MATH 104: Trigonometry for Calculus
Summer 2011 Section 001 1 credit hour

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Modifications

The instructor reserves the right to make modifications to this syllabus. Students will be notified when such changes occur.

Course Content

This course focuses on trigonometric functions and their inverses, including related identities, analytic work, and applications.

Grades

To ensure that you receive a certain letter grade (or better), you must attain a minimum overall percentage. These minima are: A: 90; B: 80; C: 70; D: 60.

Assignments/Assessments

<i>Date</i>	<i>Event</i>	<i>Percentage</i>
<i>Various</i>	<i>Reading quizzes</i>	<i>10</i>
<i>Various</i>	<i>Content quizzes</i>	<i>50</i>
<i>May 27, May 31, June 2</i>	<i>Final Exam</i>	<i>40</i>

Text and Materials

- Required Text: None.
- MATH 104 students are expected to have a calculator with standard mathematical operations and the capability to compute trigonometric and inverse trigonometric functions. Although not mandated, students may find a graphing calculator beneficial. This may make completion of potential assignments less tedious in nature, reducing the time spent on computations and leaving more time for conceptual understanding.

Course structure

This course is designed as an online, independent study of essential topics in trigonometry, with the goal of obtaining the knowledge required for success in the core calculus sequence. The material is grouped into nine specific lessons, with each lesson separated into sections. You should read each section in order, as the new course material will often build upon a previous section or lesson. After each section (or sometimes a group of sections), you will take a "Reading quiz," consisting of a few basic questions of various types concerning the reading(s) just completed.

At the end of each lesson, you will take a "Content quiz," consisting of multiple choice questions that range from "quick & basic," to "time consuming & challenging." Your grade on each quiz (reading or content) will be

automatically recorded in Blackboard. At the end of the course, you will take a written final exam, in person, proctored by Winthrop staff.

Using Blackboard

You will need to login to Blackboard to access all course material and assessments, with the exception of the final exam. Here are instructions for doing so:

1. Go to <http://online.winthrop.edu>.
2. Click on the link for “New Blackboard.”
3. Log into Blackboard with the same user name and password as you use to login to Winthrop email. For example:
 - a. Username: whetstonek2
 - b. Password: Enter Your Winthrop Email Password
4. After you log in, on the right side of the screen, in the My Courses module, click on the title for your course.
5. Once inside the course, you will be viewing the Home Page. Use the menu on the left side of the screen to navigate through the course. Note: If you do not see the menu on the left side of the screen, it may be hidden. Click on the arrow on the left side of the screen to reveal the menu.

Getting Blackboard help

1. Log in issues: Please contact the help desk at 323-2400 or helpdesk@winthrop.edu.
2. Tutorials: You can find helpful tutorials for using Blackboard at the following web site: http://www2.winthrop.edu/webct/Blackboard_Training_Tutorials.html.
3. Blackboard User’s Guide: You can find the Blackboard user’s guide by logging into Blackboard, and at the very top of the screen, click on the Help link, and then click on User Guide. You can search for a specific topic that you need help with.
4. For additional assistance: Please contact Kimarie Whetstone, Online Learning Coordinator at 323-2551 or whetstonek@winthrop.edu.

The study materials

The nine lessons are organized in separate folders under the “The lessons,” heading which is accessible from the main menu in the Blackboard course. The readings, quizzes, and other materials within each lesson are to be viewed in sequential order, and is enforced by link availability in Blackboard.

Reading quizzes

After each section or group of sections within a lesson, you will see a reading quiz. This is a short quiz containing just a few questions in various formats: Multiple choice, multiple answer, fill in the blank, matching, etc. These quizzes can be saved and resumed at a later time. Note, however, that after an answer is submitted during a quiz, it cannot be changed. Questions are typically worth 10 points each, with occasional partial credit allowed for certain problems. Upon completion of a reading quiz, your score will automatically be recorded by Blackboard. You may take this quiz as many as three times, and your highest score of these will be used to compute your end of course grade.

The deadlines for completing your quizzes are specified in the course calendar on the last page of this syllabus. Your cumulative points earned on the 26 reading quizzes will be used to compute your overall reading quiz percentage, which will comprise 10% of your course grade.

Content quizzes

At the end of Lessons 2 through 9 each, you will see a content quiz over the lesson material. These are typically 15 - 25 questions, all with multiple choice as their format. As such, there is no partial credit. These quizzes can be saved and resumed at a later time. Note, however, that after an answer is submitted during a quiz, it cannot be changed. Questions are typically worth 10 points each. Upon completion of a content quiz, your score will

automatically be recorded by Blackboard. You may take this quiz as many as three times, and your highest score of these will be used to compute your end of course grade.

The deadlines for completing your quizzes are specified in the course calendar on the last page of this syllabus. Your cumulative points earned on the 8 content quizzes will be used to compute your overall content quiz percentage, which will comprise 50% of your course grade.

Getting help in the course

I will have office hours available, as mentioned at the beginning of this syllabus, and will be happy to help you with the material in person, as needed. Assistance via telephone or e-mail is available as well. Additionally, message boards on Blackboard will provide a forum for questions and answers that all can view and respond as appropriate. Other assistance will be considered as the course is in progress.

Final exam

The final exam is the only event requiring your presence at Winthrop University, and will be administered by university personnel. You may take the exam as many as three times, and your last score (not necessarily your highest) will comprise 40% of your end of course grade. The final exam will be a cumulative assessment of your knowledge of lessons 1 through 9, and may consist of various question types - multiple choice, multiple answer, workout, short answer, etc.. Partial credit may be allowed for questions of certain types. Although the workout problems provided at the end of each lesson are not required for completion of the course, you may find these helpful to study for the final exam. More details about the nature of the final exam will be provided during the course.

Missed quiz/exam policy

There will be no make-up quizzes or exams, as you already have multiple opportunities to take and succeed at each.

Students with Disabilities

Winthrop University is dedicated to providing access to education. If you have a disability and need accommodations, please contact Gena Smith, Coordinator, Services for Students with Disabilities (SSWD), at 323-3290, as soon as possible. Once you have your Professor Notification Form, please tell me so that I am aware of your accommodations. If you require special testing consideration for a disability, contact the SSWD and bring me the appropriate paperwork in a timely fashion.

Policies

1. Review the student code of conduct for university polices on academic misconduct. Academic misconduct will not be tolerated and will result in a failing grade on the assignment and/or in the course. The full handbook is available online at: (<http://www2.winthrop.edu/studentaffairs/handbook/StudentHandbook.pdf>)
2. All electronic devices (including cell phones) other than a calculator should be on silent and kept in your book bag or purse during the final exam. (Note if you have some educational, health, or physical reason for an electronic device you must work with your professor to inform them of the accommodation.)

SU Deadline: May 17

Course Withdraw Date: May 23

Final Exam: May 27, May 31, June 2

Course goals:

1. Use the unit circle to develop and understand the trigonometric functions, associated fundamental identities, and corresponding applications.
2. Relate the trigonometric functions to their inverse operations, their developmental constraints, and their use in problem solving.
3. Understand and use right triangle trigonometry to solve problems involving acute angles.
4. Prepare for theoretical and computational demands of calculus involving measurement, identities, and function analysis.

General education goals:

- 2.1 Solve mathematical problems of the type necessary for living in today's and tomorrow's world.
- 2.2 Make valid inferences from data.
- 2.3 Understand that quantitative analysis is important to almost every endeavor of humankind.
- 2.4 Understand the concept and application of quantitative relationships.
- 3.1. Identify sound and unsound reasoning.
- 3.4. Use computers competently.

Course Calendar

Date	Lesson	Event	Quiz availability	Subject(s)
May 16	1	Reading quiz 1.1 Reading quiz 1.2 Reading quiz 1.3 Reading quiz 1.4	Until 11:59p, May 19, 2011	The unit circle and radians
17	2	Reading quiz 2.1 Reading quiz 2.2 Reading quiz 2.3 Lesson 2 content quiz	Until 11:59p, May 20, 2011	The sine and cosine functions
18	3	Reading quiz 3.1 Reading quiz 3.2 Lesson 3 content quiz	Until 11:59p, May 21, 2011	More trigonometric functions
19	4	Reading quiz 4.1 Reading quiz 4.2 Reading quiz 4.3 Reading quiz 4.4 Lesson 4 content quiz	Until 11:59p, May 22, 2011	Basic trigonometric identities
20	5	Reading quiz 5.1 Reading quiz 5.2 Reading quiz 5.3 Reading quiz 5.4 Reading quiz 5.5 Lesson 5 content quiz	Until 11:59p, May 23, 2011	Inverse trigonometric functions
23	6	Reading quiz 6.1/2/3 Reading quiz 6.4/5/6 Lesson 6 content quiz	Until 11:59p, May 26, 2011	Right triangle trigonometry
24	7	Reading quiz 7.1 Reading quiz 7.2/3/4 Lesson 7 content quiz	Until 11:59p, May 27, 2011	Measuring triangles
25	8	Reading quiz 8.1 Reading quiz 8.2/3 Lesson 8 content quiz	Until 11:59p, May 28, 2011	More trigonometric identities
26	9	Reading quiz 9.1/2 Reading quiz 9.3 Lesson 9 content quiz	Until 11:59p, May 29, 2011	Advanced graphs of trigonometric functions
27		Final exam		1 st attempt
31		Final exam		1 st or 2 nd attempt
June 2		Final exam		1 st or 2 nd or 3 rd attempt