

**Youngstown State University
Department of Mathematics and Statistics**

Course Outline for Math 1504

Course Title: Intermediate Algebra with Trigonometry

Course Credit: 5 s.h.

Text: Intermediate Algebra with Trigonometry

By Dugopolski and Bergman, McGraw Hill – Primis Online (Custom Text)

Required: Student Passcode for MathZone (available at bookstore)

Course Prereq: Level 2 on Math Placement Test or Math 1501, and high school geometry

Course Description: A continuation of Math 1501, emphasizing nonlinear equations and inequalities, problem solving, quadratic functions, exponential and logarithmic functions, and an introduction to trigonometry.

Course Objectives:

1. To enable students to apply mathematical methods to solve real world problems which arise in many fields of study.
2. To prepare students for Precalculus and/or Fundamentals of Physics.
3. To develop in students the ability to effectively communicate mathematical solutions to problems.

Textbook Topics for Algebra

Chapter	Sections
3	3.1 – 3.3 (Review briefly), 3.5
5	Chapter Review
6	6.1 – 6.6
7	7.1 and 7.2 (review briefly), 7.3 – 7.5
8	8.1 – 8.3, 8.5 (Quad. Inequalities)
9	9.1 - 9.4
10	10.1 – 10.4

**Textbook Topics for Trigonometry

Prerequisites from Geometry (review briefly) (pp. 1-20)

Similar Triangles and Right Triangles (review briefly) (pp. 20-41)

The Trigonometric Ratios (pp. 41-61)

The Trigonometric Functions and Cartesian Coordinates (pp. 61-86)

Circles and Radian Measure (pp. 108-127)

The Unit Circle and the Trigonometric Functions (pp. 127-148)

Graphing the Trigonometric Functions (pp. 148-172) (Graphs of $\sin(x)$ and $\cos(x)$ only)

**Approximately three to four weeks will be devoted to trigonometry topics.

All tests and quizzes are closed notes and closed book. Scientific calculators are required. (Graphing calculators may be used only with permission of the instructor.)

If an exam or quiz, is missed, the instructor must be notified within twenty-four hours and the student will be expected to have a valid, documentable reason for having been absent. (Messages for instructors can be left by call the Math Office (330) 941-3302 between 8:00 and 5:00, leaving voice mail messages by calling individual instructor, or by e-mailing your instructor.)

Grading: Student scores will be calculated by both methods 1 and 2 as shown. The grade will be determined by the method most favorable to the student.

	Method 1	Method 2
Seven Algebra quizzes (pencil and paper)	100 points (best five quizzes)	100 points (five best quizzes)
Trigonometry quizzes and/or written assignments	50	50
Departmental Trigonometry Test (pencil and paper)	100	100
Algebra Midterm (pencil and paper)	100	0
Departmental Algebra Final Exam (pencil and paper)	100	200
Final given Monday of finals week 3:15 – 5:15		
Optional Activities/Assignments	50-100 points	50-100 points

90%-100%, A

80% - 89%, B

67%-79%, C

50%-66%, D

0%-49%, F

Incomplete and Late Withdrawal Policy: see Schedule of Classes

Students with Disabilities: In accordance with University procedure, if you have a documented disability and require accommodations to obtain equal access in this course, please contact the Office of Equal Opportunity and Disability Services at the beginning of the semester or when given an assignment for which an accommodation is required. Students with disabilities must verify their eligibility through the Office of Disability Services in Wick House, (330) 941-1372 intake procedure.

Need help: Stop in the Mathematics Assistance Center, Cushwa Hall 3090, to inquire about the free services available for this course.

Behavior: Students are required to act appropriately at all times. No software downloading is permitted, no instant messages, no e-mail checking, no game playing etc. Any student caught violating this policy will be prohibited from using the lab. Downloading of pornography and other serious violations of “The Code of Student Rights, Responsibilities, and Conduct” will result in a disciplinary hearing and possible expulsion from the University. Whether in the lab or in the classroom, students are to treat each other and their instructor with respect. Students violating this policy will be asked to leave. Continual disruption will result in disciplinary action.

Academic Dishonesty: Absolute and total honesty is required in this course. Any deviation from acceptable behavior will result in a failure in this course and a recommendation by the instructor to the University Disciplinary Committee that the student be dismissed from the University.

Semester: **Spring 2007**

Last Day to Withdraw with a “W”: **Thursday, March 29, 2007**