Georgian

Georgian College
Academic and Career Preparation Program

ACE Technical Math, AACE 1006

Course Description

In this course students prepare for mathematics-focused post-secondary programs. Students solve applied problems involving trigonometry, polynomial/rational/exponential expressions, polynomial/exponential/logarithmic functions, and the principles of geometry and measurement.

Learning Outcomes

Upon successful completion of this course, the student will have reliably demonstrated the ability to:
1. use computation and algebraic manipulation;
2. apply measurement for various purposes;
3. solve problems involving geometry and trigonometry;
4. solve exponential and logarithmic equations;
5. analyze models of a variety of functions, including exponential, logarithmic, and trigonometric functions.

Course Materials, Content, and Evaluation

The primary textbook for Technical Math, *Intermediate Algebra 2e*, is an open educational resource (OER) and provided at no cost to students. You will also find the course content, assignments, quizzes, etc. on Blackboard, the college's learning management system (LMS). Course modules are listed in the chart on the next page.

The passing grade for this course is 50%, and ALL modules must be completed to receive a final mark. Please note that students who are pursuing post-secondary programs are responsible to find out the prerequisite(s) needed for acceptance, including any required grades. Admission requirements can change from one year to another, so it is important to make sure you have the most up to date information.

Course Modules

MODULES	ESTIMATED HOURS	ASSESSMENT TYPE	WEIGHT
Algebra Review	4.8	Assignment	5%
Solving linear equations	8.4	Test	7%
Systems of Equations	9.6	Test	8%
Systems of Equations with 3 Unknowns	3.6	Assignment	3%
Factoring	8.4	Test	7%
Rational Expressions	14.4	Test	10%
Roots and Radicals	6.0	Test	7%
Use the Complex Number System	3.6	Test	3%
Quadratic Equations and Functions (Technical)	13.2	Test	10%
Properties of Exponents	6.0	Test	5%
Logarithms	6.0	Test	5%
Advanced Measurements with Estimation	9.0	Assignment	7.5%
Geometric Relationships	9.0	Assignment	7.5%
Right Angle Trigonometry	7.2	Test	6%
Oblique Angled Trigonometry	8.4	Test	7%
Angles (Radians)	2.4	Assignment	2%
TOTALS	120 hours	Tests 75% Assignments 25%	100%