

Course Number: MA 1030

Course Title: Applied Algebra

Course Description:

This is a pre-calculus course that provides the student with the algebra background necessary to be successful in subsequent math courses. Topics covered are real numbers, algebraic expressions, functions and graphs, equations and inequalities, systems of equations, exponential and logarithmic functions.

Prerequisites: MA 1010 with a grade of C or higher.

Credit hours: 3

Learning Outcomes:

Upon successful completion of this course, a student will be able to:

1. Solve quadratic equations using extracting square roots, factoring and/or the Quadratic Equation
2. Simplify and solve exponential and logarithmic equations
3. Solve linear systems of equations with two or three variables
4. Analyze and graph functions* (x- and y-intercepts, slope, domain, range, asymptotes)
5. Use translation properties to sketch the graphs of functions*
6. Construct and analyze models with quadratic functions, systems of equations, exponential functions and logarithmic functions

* Linear, quadratic, cubic, reciprocal, exponential and logarithmic functions

Indiana Tech
College of Professional Studies
MA 1030 Applied Algebra
Online Syllabus Course Content

Instructor Information

Please see Professor Profile at the Blackboard instructional site.

Course Schedule

Please see Course Schedule in the Course Syllabus area of the Blackboard instructional site.

Online Course Policies

All of the online courses taken by students are required to follow the policies posted online at <http://online.indianatech.edu/tech-policies/policies/>. Please review the posted policies carefully. If you are unable to abide by the policies listed, please contact the Warrior Information Network (WIN) at 888.832.4742 and request to withdraw from this course.

Textbook

Larson, R. (2014). *College algebra*. Boston, MA: Cengage Learning.

Grading Events & Grading Criteria

Unless otherwise specified, all assignments must be submitted via Blackboard.

- **Course Preparation Quiz – (2% of final grade)**
- **Quizzes - (69% of final grade)**
 - There will be nine (9) quizzes in this course. Each quiz will be graded out of 10 points and your lowest quiz score will be dropped from your final grade calculation. You have two attempts to complete each quiz. Consult the course calendar for deadlines for each quiz.
- **Homework Assignments - (29% of final grade)**
 - There will be 23 (23) short homework assignments. Each question is worth 1 point, so the total points for a homework assignment depends on how many problems are to be completed. Your lowest three (3) homework scores will be dropped from your final grade calculation. You have two attempts to complete each homework assignment. Consult the course calendar for deadlines for each homework assignment.
- **Practice Questions – (not counted in final grade)**
 - It is important to do the practice questions before the first quiz to try out the concepts in a non-graded environment, and they enable you to practice how to use the online system for submitting your answers.

Grading Scale

The following grading scale will be used to assign a grade at the end of the course:

Percentage Achieved	Grade	Percentage Achieved	Grade	Percentage Achieved	Grade
93% or above	A	80% or above	B-	70% or above	C-

90% or above	A-	77% or above	C+	60% or above	D
87% or above	B+	73% or above	C	Below 60%	F
83% or above	B				

Late Assignments

All assignments and required online activities are due according to the deadline listed in the course schedule. Granting deadline extension is the course instructor's autonomy.

Incompletes

If you are unable to complete the requirements for this course due to extenuating circumstances, an Incomplete grade (I) may be granted if you meet the general guidelines stated below.

General Guidelines for submitting a course incomplete request:

- More than 50% of the course session has elapsed.
- The student has encountered an unexpected situation that is beyond his or her control.
- The student is
 - in good academic standing -- up-to-date on all of the course assignments and has at least an overall passing grade,
 - able to complete all of the remaining coursework within a session that immediately follows the session the student is currently enrolled, and
 - able to provide support documentations to substantiate the need for extra time should a session not be enough to complete the course requirements.

If an Incomplete is granted, the instructor will set a deadline for all work to be completed. The deadline cannot go past one (1) session. All incomplete grades and deadlines are subject to approval by the designated University authority.

Course Related Communication

Online courses are conducted in an accelerated format. Timely communication is very important. When receiving emails from your classmates or instructor, please respond as soon as you can.

Students are REQUIRED to use their Indiana Tech email account for all course related communication. The most direct, and effective, way to email your course instructor and classmates, is by using the Send Email function within the Blackboard course site. When you use the Send Email function, you automatically receive a carbon copy of the email you sent. In the event when you need to substantiate your claim that you did email your classmates or instructor, you can show that carbon copy to the person(s) who requested it.

Please note that Blackboard only permits you to send email, it does not provide you with the check email function. All of the emails your classmates and instructor send to you will be delivered to your Indiana Tech email account. You are strongly encouraged to check your Indiana Tech email account regularly, preferably several times a week, to minimize the likelihood of miscommunication.

The University policy requires each online course instructor to respond to a student's email within 24 hours. Unless there is an extraneous situation that prevents the instructor from following this rule, you can expect to hear from the instructor within 24 hours. If you don't receive a reply within 24 hours,

please do not hesitate to follow up with another email or forward the carbon copy of the email you sent to OnlineSupport@IndianaTech.edu with a note "Please help. It's been 24 hours and I have not heard from my instructor" and the University support staff will act on your behalf to contact your course instructor.