## Syllabus College Algebra

## MAT 102

 Times: Tues & Thurs
 9:30 AM-10:45 AM
 Rm: Dobbs 106
 MAT 102 010-MC

 Tues & Thurs
 11:00 AM -12:15 PM
 Rm: Dobbs 106
 MAT 102 020-MC

#### Instructor: Loretta Muise

E-mail: Loretta.Muise@Reinhardt.edu Web resources: <u>https://eagleweb.reinhardt.edu/ics/Campus\_Life/Campus\_Groups/Math</u> Office Hours: by appointment only, before classes.

Learning Management System and Textbook: PRECALCULUS, 2/E, by Sisson, Hawkes Learning Systems (HLS), ISBN-10#1-938891-33-3. Any version of the book (e-copy, loose leaves, etc.) is acceptable. An individual license (and access code) for the software is mandatory. The software includes an e-book. The homework will be completed using an online platform by Hawkes Learning Systems (HLS). You will have to create an account at <a href="https://www.hawkeslearning.com/">https://www.hawkeslearning.com/</a> The registration procedure is explained at <a href="https://www.hawkeslearning.com/Students.htm">https://www.hawkeslearning.com/</a> The registration procedure is explained at <a href="https://www.hawkeslearning.com/Students.htm">https://www.hawkeslearning.com/Students.htm</a> and in some handouts on our EagleWeb page. *We will do this together on the first day of class.* At time of registration, you will need to be connected to the internet, use your Reinhardt email address and select Reinhardt University, the product Precalculus, and instructor and section labeled MAT102 Section 01 for 9:30 am class and MAT102 Section 02 for 11:00 am class.

#### Course Coverage: Chapters Selected sections of Chapters 1 - 6, and 11

**Technology: Graphing calculators and Hawkes software are required: I will use a TI 84, Desmos and or GeoGebra.** A TI-83 or above will be the most useful. If you have a different type of **graphing tool** (like an application on a smartphone) then you may use that. If you have never used a graphing calculator then get a Texas Instruments because I will use it for class explanations and demonstrations since that is the kind most students use. A **free PC emulator is available among our Web resources** (above).

## **Technology Requirements:**

Students should be aware of the technological requirements for engaging in class sessions delivered by online platforms. These class sessions may be accessible by smart devices (phones and tablets.) However, in some situations, a student may find that is it best to access these learning sessions through a computer (laptop or desktop.) Students will likely need a computer to submit required files and file types for assignments.

## **CATALOG DESCRIPTION:**

This course is designed to show the student the application of mathematical modeling in their life. Practice is provided in manipulative skills, and a number of applications of these skills are presented. Topics include loans and investments, linear models and systems, functions, relations, exponential functions, power functions, logarithmic functions, quadratic functions, polynomial functions, matrices, and systems of linear equations. Prerequisite: University placement, or grade of P, or C or better in any MAT course numbered 100 or above.

**CREDIT HOURS: This is a 3 credit hours course.** Courses offered in a 16-week session are twice as intensive as those held during the regular fall or spring semesters. Over 16 weeks, students will spend 280 minutes per week in classroom instruction, including lectures, class discussions, and examinations (32.7 hours for the term). Instructional time includes a 2.5-hour final exam. Out-of-class work includes homework and preparation for exams and quizzes, and it is estimated at around 684 minutes per week (79.8 hours for the term).

#### **CONCEPTUAL FRAMEWORK:**

The Mathematics Department at Reinhardt University believes that all students should have an exposure to the ideas of science and the scientific method. This includes exposure to laboratory procedures, familiarity with some of the vocabulary of science and ability to read scientific articles in the newspaper or in popular magazines.

The Mathematics Department at Reinhardt University believes that all students should be familiar with the systematic development of science through history. This includes an understanding of the effects that science has had on history and that history has had on scientists.

The Mathematics Department at Reinhardt University wishes to convey to students that science is a continuing endeavor that will not ever be finished. This includes an introduction to the interaction of theory and observation.

**COURSE RELATIONSHIP TO CONCEPTUAL FRAMEWORK:** The course will be taught using lectures, in-class problem solving activities, and a computerized homework system (HLS).

**MATHEMATICS PROGRAM OBJECTIVES:** The Mathematics Program at Reinhardt University offers courses geared to **MPO1** Analyze and solve problems by using reasoning, logic and evidence, and by bringing knowledge from a wide range of mathematical areas.

**MPO2** Use effective written and oral expression of mathematical concepts in the creation of a mathematical argument by recognizing a wide range of mathematical terms and vocabulary.

MPO3 Apply axiomatic systems.

**MPO4** Apply mathematical research methodologies by using libraries, informational technologies, computer programming and numerical methods in order to create solutions to problems.

**MPO5** Apply ethical, legal, and policy issues to Information Technology

MPO6 Create IT solutions to solve organizational problems.

**MATHEMATICS PROGRAM STUDENT LEARNING OUTCOMES:** Taking this course, students will be able to **SLO1** Solve a word problem by applying the appropriate mathematical setup, obtaining the mathematical solution, and interpreting this solution in the context.

**SLO2** Solve a theoretical problem by identifying the appropriate mathematical context, interpreting the question and the nature of the solution, and checking that the solution is correct.

SLO3 Complete a proof or produce a mathematical object that satisfies specific properties.

**SLO4** Solve a problem by consulting various resources, applying appropriate technological tools, and using adequate approximations.

SLO5 Analyze how information technology affects ethical and legal issues.

SLO6 Synthesize appropriate solutions to organizations' problems.

## **POLICES:**

**Cell Phone Policy:** Please turn off or turn all cellular phones on silent. Do not use them in class without prior permission by your instructor.

Attendance: Students are expected to attend each session. If you miss a class, you are responsible for finding out what was covered and getting the work done.

Late Policy: Work submitted late will be penalized (20%) unless there is a documented extenuating circumstance provided to the instructor.

Academic Dishonesty: All students are expected to adhere to the highest standards of academic integrity, and to abide by the Reinhardt Honor Code. Also, all students are expected to be familiar with the Reinhardt policy on academic dishonesty stated in the University Catalog and in the Student Handbook. Plagiarism (using the ideas and phrases of others without crediting them, therefore claiming those ideas and phrases as your own) will not be tolerated in this course or on this campus. To avoid such academic dishonesty, you must use a citation (footnote or in text) for all ideas drawn from your reading and research, including research in encyclopedias and online, even when you have restated those ideas in your own words. Consequences for cheating or plagiarizing:

a) you will earn a zero for the assignment;

b) the Office of the Vice President for Academic Affairs will be notified of actions taken against

students who violate the academic integrity policy, which may result in further consequences, including designation of "academic warning" on your official transcript, academic suspension, or

expulsion for academic reasons.

**Quality of Student Work**: Use of proper grammar, correct spelling, and writing principles are expected in all work. Full credit will not be granted for work that contains grammar or spelling errors.

**Expectations**: You are expected to read and study our textbook. Reading a section before it is covered in class is a great habit! For each instructional hour students are expected to spend a minimum of two hours in independent work activities: therefore, for this class each student is expected to "work at home" for almost twelve hours each week. Students are expected to pay attention and participate in class. Use of personal laptops is encouraged, but access to the college computer labs is granted. **Communications:** All written communications will be through Reinhardt email.

**GRADE DETERMINATION:** Your grade will be based on three (3) exams, (1 exam in class and 2 exams online in Hawkes Learning System, Final Exam, and homework, with the following weights:

Exams(4) & Final Exam	70%
Homework	30%
Total	100%

You may exempt the final exam. (See below) If you choose to exempt the final your **lowest exam grade** will be entered as your **final exam grade**. No make-up tests will be given. For University related absences on a test day, it is possible to schedule an *earlier date for the test*: **it is student's responsibility to make arrangements at least a week before the scheduled absence**. The Final Exam will be comprehensive.

## Final Exam Exemption: If after Exam #3

1) you have earned at least 85% of all available points (3) exams and homework); and

2) you have 2 or less unexcused absences; then **you may exempt the final exam** and your **lowest midterm score** will count as your final exam score.

Attendance: Regular attendance is required and roll will be taken at each class meeting. You will find this class much easier to pass and do well in if you attend each class. Usually what you learn on one day you will have to use the following day so you will quickly get behind if you miss classes. As an incentive the following applies

#### Homework:

**Certify:** You will be assigned "Lessons" through Hawkes Learning Systems (HLS), as scheduled below at point XIII. You need to complete each assignment by its due date, **homework sections covered during any week are due the Sunday after lesson presentation and by 11:59 pm.** The goal of these assignments is to help you better understand the material explained in class. Note: alternative methods may be illustrated in class. This is the number-one-way to get a good grade in this class – do your homework each day and then you will be ready to learn the new information. It is much more difficult to catch up then to keep up! Homework will be graded by the software and you will receive immediate feedback. Please, use all the tools available to you in order to succeed in this course. Late homework will be penalized 10% each day late. It is suggested that you start homework about a section the same day this section has been covered in class. Homework can be completed before its due date.

**NOTE**: Once a Web-Test it is started it must be completed within the time limit AND the due time. For instance, a 50 minutes Web-Test due by Sunday at 11:59 PM should be started not later than Sunday at 11:08 PM in order to have the full time available.

## **GRADING SCALE:**

 $A=[90, \infty),$  B=[80, 90), C=[70, 80), D=[60, 70), F=[0, 60)

**CSS:** The Center for Student Success (CSS) is located on the top floor of the library, Rm 313. **CSS offers free peer and faculty tutoring for all subjects**. For appointments, go to Reinhardt webpage and click <u>Center for Student Success</u>.

**ADA and ASO:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. This legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. Reinhardt University is committed to providing reasonable accommodations for all persons with disabilities. Therefore, if you are seeking classroom accommodations under the Americans with Disabilities Act, prior to contacting me you are required to register with the Academic Support Office (ASO). ASO is located in the basement of Lawson Building. Phone is 770-720-5567. To receive academic accommodations for this class, please obtain the proper ASO letters.

# **PROJECTED COURSE OUTLINE** (subject to change at instructor's discretion)

Week/date	Class Coverage	Special events
<b>01</b> : Aug 15, 17	Syllabus, \ Chap 1 Sections 1.1-1.3, 1.6	SIGN UP FOR HAWKES LEARNING in Class
Aug 21		AUG 21 Final Day to ADD/DROP
<b>02</b> : Aug 22, 24	Chap 1 Sections 1.7, 1.8, 1.9	
<b>03</b> : Aug 29, 31	Chap 2 Sections 2.1, 2.3,2.4,2.5	
Sept 4		LABOR DAY University Closed
<b>04</b> : Sept 5, 7	Review Exam	Exam #1 Chapter 1 & 2 in class
<b>05</b> : Sept 12, 14	Chap 3 Sections 3.1, 3.2	
<b>06</b> : Sept 19, 21	Chap 3 Sections 3.3, 3.4	
<b>07</b> : Sept 26, 28	Chap 3 Sections 3.5 Chap 4 Section 4.3	
<b>08</b> : Oct 3	Chap 3 Section 4.4	
Oct 4-6		No Classes Fall BREAK
<b>09</b> : Oct 10, <del>12*</del>	Review Chap 3 & 4 Exam	No Class Oct 12 – Online Exam #2 Chap 3 due by 11:59 pm Oct 12
Oct 10		Final date to <b>withdraw</b> with grade of W
<b>10:</b> Oct <del>17*</del> , 19	Exam Chap 5 Section 5.1	No class Oct 17 – Online Exam #3 Chap 4 due by 11:59 pm Oct 17.
Oct 16-27		Advising/ Registration for winter 2022, and spring and summer 2023
<b>11</b> : Oct 24, 26	Chap 5 Section 5.2 Chap 6 Section 6.1	
<b>12</b> : Oct 31, Nov 2	Chap 6 Sections 6,2, 6.3, 6.4	
<b>13</b> : Nov 7, 9	Chap 6 Sections 6.5 Review	
Nov 13		Online Exam #4 Chapters 5, 6 to be completed by Nov 13, 11:59 pm
<b>14</b> : Nov 21, 17	Chap 11 Sections 11.1, 11.2	
Nov 21	Review for FE	Last Day of Class
Nov 22-26		Thanksgiving Holidays University Closed
16: Final Exam		Final Exam See dates and times below

Final Examinations will be given in the same classroom assigned for each course.

MAT 102 TR 9:30 AM - 10:45 PM class will be given on November 27 from 11:15am-2:15pm

MAT 102 TR 11:00 AM - 12:15 PM class will be given on November 28 from 2:30pm-5:30 pm

\*Indicates no in person class and completion of an exam on that day.