

# Math 120.0CW: Foundations of Mathematics for Non-STEM MajorsCOURSE SYLLABUS: Spring II 2023, 3 semester credit hrs

SPECIAL NOTE: THIS COURSE IS A CO-REQUISITE MODEL COURSE, ALL STUDENTS MUST ALSO BE ENROLLED IN A SECTION OF MATH 1332 or 1342!!

#### **INSTRUCTOR INFORMATION**

Instructor: Paul Jones

Office Location: Virtual only (live out of state)

Office Hours: MW 4 – 5pm, Virtual by Appointment

University Email Address:

Paul.Jones@tamuc.edu

Preferred Form of Communication: email

Communication Response Time: within 24 hours
First Day of Class
Last Day of Term

May 5, 2023

#### COURSE INFORMATION

## Materials - Textbooks, Readings, Supplementary Readings:

<u>Text & Supplement:</u> A textbook is not assigned for this course. All assignments are provided with links to Internetsources and/or document files. This course has been designed using Open Educational Resources (OER). All materials are embedded within the course and are accessible via the internet. After taking the pretest, students are encouraged to bookmark, download, or save materials provided via the internet for use during quizzes, assignments, and projects in this class.

## **Course Description:**

Foundations of Mathematics for Liberal Arts Majors. Intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. In particular, students who are majoring in fields considered to be in the "liberal arts" (students who will not be continuing in an Algebra-intensive math pathway), and who are not TSI complete, will take this course. Course topics include: Basic algebraic operations, equations and inequalities, polynomials, functions, rational expressions, exponents and radicals, quadratic equations, and graphing. The course helps prepare students for further study at the level of college mathematics, particularly in first year, non-STEM math courses. This course is considered developmental and may not be used to satisfy any mathematics or degree requirements. This course is being used as a co-requisite course to support students in their study at the college level of mathematics, specifically in Contemporary Mathematics or Elementary Statistics. The course is broken down into 4 competencies and 2 projects.

#### **Student Learning Outcomes:**

Upon successful completion of this course, students will:

1. The student will be able to view, interpret, and create graphics, tables, and multiple representationsappropriately.

- 2. The student will demonstrate knowledge of arithmetic and basic algebraic concepts such asoperations with fractions and decimals, order of operations, and basic set notation.
- 3. The student will be able to accurately interpret and utilize algebraic concepts such as subscripts, summation symbols, and formulas.
- 4. The student will be able to effectively work with radical and rational expressions, particularly within formulas utilized in the college-level course.
- 5. The student will demonstrate a mastery of counting techniques and a sense for the beauty ofmathematics in the world around them.
- 6. The student will be able to navigate successfully in the college-level math course

## **COURSE REQUIREMENTS**

#### **Minimal Technical Skills Needed:**

Students must have a minimal amount of technical skills to be successful in this course. Skills needed include, but are not limited to: using the online learning system (D2L) in MyLeo; using Microsoft Word, Excel, and PowerPoint; and the use of email.

#### **Instructional Methods:**

<u>Instructional Methods</u>: This course is 100% online. As such, communication and assignment submission is all doneelectronically. Power points, resources, assignments, and tests are all located within the online course/

Should you have trouble finding anything, please e-mail the instructor to point you in the right direction. While not all discussions and assignments are required, students are encouraged to participate in all activities. Should you find yourself struggling with assignments in the course, please watch videos and complete all reading before e-mailing theinstructor to ask for further assistance in comprehending certain subject matter.

Participation in assignments/discussions etc. will help the material be more understandable and. Your participation willdirectly affect your success in the course. The more hours you spend in the course utilizing provided resources, the more likely you are to succeed in the course.

#### **Student Responsibilities or Tips for Success in the Course:**

Students are encouraged to log-in to the course every 24 hours. While not required, students are encouraged to complete an entire competency every week. This means by week 4 of the 7-week semester, they have attempted to testout of all 4 competencies. This allows the student sufficient time to re-do any failed competency posttests. By the end of week 6 students should have completed both projects.

Students are encouraged to e-mail the professor as they encounter concepts that after reading and utilizing courseresources (supplemental documents, Youtube videos, etc.), still do not understand.

Students are encouraged to engage other classmates in discussions or thoughts that pertain to course material. Regularparticipation and engagement ensures the best chance at successful completion of the course.

As a general guide, students enrolled in a three semester hour course should spend one hour engaged in instructional activities and two to three hours on out-of-class work per week in a traditional semester. Students are expected to double this effort of engagement given that this course is being delivered in a seven-week term. Educational activities in this course are designed to ensure regular and substantive interaction between students and faculty to ensure that students are able to demonstrate competency.

#### **GRADING**

#### **Assessments:**

# **Pretest and Posttest for Each Module:**

The purpose of the pretests is to provide a baseline understanding of your knowledge in each module.

The posttest is an assessment of your knowledge of the material required for the module. A score of 80% or higher is required on the Posttest to demonstrate competency. If you score less than 80% on any module you will have an opportunity to review the material and re-take the module Posttest. You will have up to three attempts at passing each competency. If you have not passed the module in three attempts, you will receive a letter grade of an F. In order to demonstrate competency, a score of 80% or higher is required.

<u>Homework:</u> Exercises will be assigned most class periods. It is extremely important for you to work all exercises in order to be prepared for the exams. Exercises can be accessed through your MyLeo portal in the app for "MyLeoOnline (D2L Brightspace)". These exercises are for self-assessment to know that you are understanding the material for the posttest. There is an answer key to check your work from each exercise. If you want further feedback forward the exercise to the instructor.

**Projects:** You will have two projects in this course. Each project will be based on expanding your knowledge and applying the information you have learned in a more application-based setting. A score of 80% or higher is required oneach project.

#### **Final Grade Calculation:**

The final grade will be assigned by taking the average of the four passing posttests and the grades of the projects.

A score of 80% or higher on both the Culminating Project and Posttest is required to demonstrate competency and receive credit for the course. The following items will be used to calculate the final grade in the course.

Item	Worth
Posttest 1	100 points
Posttest 2	100 points
Posttest 3	100 points
Posttest 4	100 points
Project 1	100 points
Project 2	100 points
Total	600 points

Note: All developmental math grades are reported with an "R" in front of them to signify that they are not college-level.

RA = 90% -100% RB = 80% - 89.9% RF = 79.9% or Below

Students are required to achieve an 80% or higher on a posttest in each competency and on the project in order to passthe course.

A grade of "B" (RB) or above must be achieved to continue to a college-level stand-alone course such as Math1332, or 1342 in the next semester. Otherwise, the co-requisite model will be repeated.

# **TECHNOLOGY REQUIREMENTS**

#### **LMS**

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are the technical requirements

Learning Management System (LMS) Requirements:

View the Learning Management System Requirements Webpage.

LMS Browser Support:

Learn more on the LMS Browser Support Webpage.

YouSeeU Virtual Classroom Requirements:

Visit the Virtual Classroom Requirements Webpage.

## **ACCESS AND NAVIGATION**

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <a href="https://helpdesk@tamuc.edu">helpdesk@tamuc.edu</a>.

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

## **COMMUNICATION AND SUPPORT**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

## **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found on the <u>Brightspace</u>

## Support Webpage.

## **System Maintenance:**

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm - 6 am CST.

## **COMMUNICATION AND SUPPORT**

## **Interaction with Instructor Statement:**

Students will be expected to interact with the instructor(s) in class or via electronic means in an appropriate manner. All instructor contact information is listed on this syllabus and should be used. Please use email to facilitate a quick response. Correspondence will always be through university email (your "myLeo" mail) and announcements in myLeo online (D2L). The instructor will make every effort to respond to emails within 24 provided the correspondence follows the requirements listed below. Students are encouraged to check university email daily.

#### All emails from students should include:

- Course name and subject in the subject line (ex. ORGL 3322 Posttest) Salutation
- Proper email etiquette (no "text" emails use proper grammar and punctuation)
- Student name and CWID after the body of the email

#### COURSE AND UNIVERSITY PROCEDURES/POLICIES

## **Course Specific Procedures/Policies:**

#### **Attendance and Continual Enrollment:**

Math 120 in a non-credited course and each student must receive a "B" (RB) or higher to move on to a stand-alone college-level math course in the next semester, if they do not pass both of the co-requisite math courses this semester. Due to the nature of this course, **attendance is a must to pass this class**. It is expected that you follow the guidelinesset forth by the Class Attendance Policy in the current Undergraduate Catalogue. Attendance in this course is participating and doing your work in a timely manner.

Also, all students should be aware that they are NOT allowed to drop a developmental math course, and that they must be continually enrolled in a math course until they have successfully completed their college-level math course. In addition, beginning Fall 2018, the state of Texas is requiring all Institutions of Higher Education to use the "co-requisite model" for all developmental courses. Thus, if you are enrolled in this course, you are ALSO enrolled in a college-level math course, for a total of SIX hours of math this semester. Therefore, all students should take this courseseriously and make every effort to be in attendance and to be successful on the daily assignments and exams.

Participation from students regularly is encouraged. There will be optional discussions, and assignments that are not required. Students are encouraged to participate as regular exposure to course content will result in a better chance atsuccessful completion of the course.

The only required assignments in this course are the pretests for each competency (there are 4 competencies which means 4 pretests). While pretests are required to pass the course, the grade does not count toward your final grade. Agrade of 80% or higher is required on a posttest to test out of each of the 4 competencies. You have 3 attempts to achieve a grade of 80% or higher in each of the 4 competencies. Aside from the test, there are two required course projects that each student is required to participate in.

#### **Comments:**

I will do my best to make a quality presentation each class and, in return, I expect that you will do your best to learn thematerial presented in class and in the text. I know that together, these efforts can contribute significantly to your education in this class.

## **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

## **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail online in the Student Guidebook.

Students should also consult the <u>Rules of Netiquette Webpage</u> for more information regarding how to interact with students in an online forum.

## **TAMUC Attendance**

For more information about the attendance policy, please view the <u>Attendance Webpage</u> and the <u>Class Attendance Policy</u>

# **Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

<u>Undergraduate Academic Dishonesty Policy</u> <u>Undergraduate Student Academic Dishonesty Form</u>

#### Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

## Office of Student Disability Resources and Services

Texas A&M University-Commerce Velma K. Waters Library Rm 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

#### **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information, or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

## **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

# **Counseling Services**

A&M-Commerce Supports Students' Mental Health. The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-8865145. For more information regarding Counseling Center events and confidential services, please visit <a href="https://www.tamuc.edu/counsel.">www.tamuc.edu/counsel.</a>

## **COURSE OUTLINE/CALENDAR**

**Topics Covered (tentative schedule):** Tentatively, the following content will be covered during the following weeks. Changes to this schedule will be made during class, if needed.

Suggested Schedule		
Week	Competency	Activities
1	Venn, Diagrams, Tree Diagrams, Graphing, Tables	Pretest, Videos, Readings, Exercises,
		Review, Posttest
2	Subscript & Summation Notation, Factorials Notation, Fundamental	Pretest, Videos, Readings, Exercises,
	Counting Principle, Radicals, At most, At least, Estimation,	Review, Posttest
	Rounding, Dimensional Analysis	
3	Substitute into an Expression, Evaluate Formulas, Percent, Decimals,	Pretest, Videos, Readings, Exercises,
	Simple Interest, Compound Interest	Review, Posttest
4	Prime and Composite Numbers, Prime Factorization, Rules of	Pretest, Videos, Readings, Exercises,
	Divisibility Fibonacci, Golden Ratio, Sequences	Review, Posttest
5	Venn Diagram Project	Work on Project
6	Buying a Car Project	Work on Project
7	Projects	Finish Projects

- \*\*\*All submissions must be turned in by the end of the last day of the term
- \*\*\* Remaining enrolled in this course constitutes acceptance of all policies contained in this syllabus.

Any changes to this syllabus and/or schedule will be communicated directly to you in class by the instructor. You are responsible for being aware of any such changes. *Good luck and work hard!!*