

# THE UNIVERSITY OF TEXAS AT EL PASO

## COLLEGE OF SCIENCE

DEPARTMENT OF MATHEMATICAL SCIENCES

### COURSE BASICS

Course Number: MATH 2301 CRN 20717

Course Title: Mathematics for Social Sciences II

Credit Hours: 3

Term: Spring 2023

Meeting and Location: MW 9:00 AM – 10:20 AM, in LART 305 (Liberal Arts Building)

Prerequisite Courses: MATH 1320 or MATH 1411 or MATH 1508 with a "C" or better

### INSTRUCTOR INFORMATION

Instructor: Tuesday J. Johnson

Office Location: Library 510

### CONTACT

Instructor e-mail: [tjohnson3@utep.edu](mailto:tjohnson3@utep.edu)

Math Department: [mathdept@utep.edu](mailto:mathdept@utep.edu)

Emails will be answered during normal university scheduling. Please allow 24 – 48 hours for the return of emails. Evening and weekend emails will be attended to during regular business hours. Other times at the discretion of the instructor.

Student Office Hours:

Student office hours are a time where you can get individualized help from me. I am available to answer questions about course content and address any concerns you have about the class. During scheduled times, you may drop in without an appointment. You are not required to attend the student office hour sessions if you do not have questions. If you do need help, and cannot attend during the scheduled time, please email me to schedule an appointment.

Office hours are only held during normal university scheduling. Please allow one business day for the return of emails. Evening and weekend emails will be attended to during regular business hours. Other times at the discretion of the instructor.

During off-scheduling (Finals week) or condensed scheduling (late start, closed university) hours will be adjusted appropriately.

### REQUIRED TECHNOLOGY AND MATERIALS

#### Textbook

Finite Mathematics & Applied Calculus by Waner and Costenoble 7th Edition with a WebAssign access code.

### Required

You must have the WebAssign access code. This gives you full access to both the assignments and the e-book.

### Optional

A hard copy of the textbook is available but not required for the class. The e-book is adequate and comes with the required access code.

### Calculator

A Scientific Calculator with the permutation/combination key is required (example: TI-30XIIS). A graphing calculator similar to a TI-83 or TI-84 is recommended. You may use a free online graphing utility and calculator such as [Desmos Graphing Calculator](#)

## COURSE OVERVIEW

### Course Objectives

The Mathematics for Social Sciences II course is designed for students who major in business, social sciences, and liberal arts. The mathematical concepts will be focused on real-life applications that students can relate to.

The course contains basic problems and their applications in mathematics, including but not limited to matrices, limits, the derivative, and its applications, and integrals and their applications.

A student who passes this course will be able to understand and work with these mathematical tools and apply them in future math courses and their careers

### Blackboard

Blackboard will be our primary platform. Inside the Blackboard course you will be able to view announcements (also sent to your email), notes, and any video I find applicable to the course.

The course will be set up in chapters with all the notes from those chapters in one folder. I will post what are called “skeletal notes” which are the notes that I will be discussing in class. These will be available in .pdf format. Upon the completion of class, I will post the completed notes in a separate folder for ease of access in PDF format.

\*All work will be completed on WebAssign, from homework and quizzes to exams.

### Grading Policy

You will be graded on homework, quizzes, and a final exam

- 40% Homework Assignments
- 30% Chapter Quizzes
- 30% Final Exam

Letter grades are determined according to the following scale:

#### Grade Score

- A 89.5 – 100
- B 79.5 – 89.49
- C 70.0 – 79.49
- D 60.0 – 69.99
- F 00.0 – 59.99

## Assignment Types

Your assignments will consist of regular sectional homework assignments, chapter quizzes, and a comprehensive final exam. All work will be completed on WebAssign.

## Campus Schedule

A comprehensive course schedule is attached as the last pages of this syllabus. Semester highlights are included.

- January 17<sup>th</sup> First Day of Classes
- February 1<sup>st</sup> Census Day (Last day to drop without a W)
- March 13<sup>th</sup> – 17<sup>th</sup> Spring Break – no classes
- March 30<sup>th</sup> Drop Day (Last day to drop with a W)
- March 31<sup>st</sup> Cesar Chavez Day – no classes
- April 7<sup>h</sup> Spring Study Day – no classes
- May 4<sup>th</sup> Last Day of Class Meetings
- May 5<sup>th</sup> Dead day
- May 8<sup>th</sup> – 12<sup>th</sup> Final Exam Week

## Drop Policy

*The Drop Date for this semester is Thursday, March 30th, before 5:00 PM MT. No drops will be approved after this date or time.*

## Incomplete Grade Policy

Incomplete grades may be requested only in exceptional circumstances after you have completed at least half of the course requirements. Talk to me immediately if you believe an incomplete is warranted. If granted, we will establish a contract of work to be completed with deadlines.

## Course Communication

We will meet twice weekly. If you would like to meet with me prior to class, please give me 24-hour notice. Other than that, here are ways we will communicate:

- **Student Office Hours:** I will have office hours for your questions and comments about the course. These will be virtual. See Blackboard for more information about times and availability.
- **Course Messages:** Course messages in Blackboard is the best way to reach me for class related items or questions that are not homework specific. My inbox every day is crowded. I will respond to Blackboard Course Messages daily and always before checking regular UTEP email. This is most definitely your best option at getting my response more quickly.
- **Email:** UTEP e-mail is a way to contact me. I will make every attempt to respond to your e-mail within 24-48 hours of receipt. When e-mailing me, be sure to email from your UTEP student account and please put the course number in the subject line. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to put your first and last name, and your university identification number.
- **Announcements:** Check the Blackboard announcements frequently for any updates, deadlines, or other important messages. All Blackboard announcements will also be sent as an email to your UTEP account, but the announcements section will always archive these messages.

- **Discord:** I have a discord channel specifically for Applied Calculus, if you would like to join (it is free) the invitation link is <https://discord.gg/RM6YUqj8vc>.

## ADDITIONAL COURSE POLICIES AND STATEMENTS

### Attendance

You are expected to work toward completion of the course assignments daily. While I will not be grading your attendance, I will be checking on your progress in class. Failing to complete tasks is equivalent to being absent. Failure to complete assignments for several weeks may result in you being dropped from the course. You are expected to check Blackboard and your UTEP miners email regularly for announcements.

### Academic Integrity

The University policy is that all suspected cases or acts of alleged scholastic dishonesty must be referred to the Dean of Students for investigation and appropriate disposition. Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, and any act designed to give an unfair advantage to a student or the attempt to commit such acts.

Each student is responsible for notice of and compliance with the provisions of the Regents' Rules and Regulations, which are available for inspection electronically at <https://www.utsystem.edu/offices/board-regents/regents-rules-and-regulations>.

All students are expected and required to obey the law, comply with the Regents' Rules and Regulations, with System and University rules, with directives issued by an administrative official during his or her authorized duties, and observe standards of conduct appropriate for the university. A student who enrolls at the university is charged with the obligation to conduct himself/herself in a manner compatible with the university's function as an educational institution.

Any student who engages in conduct that is prohibited by Regents' Rules and Regulations, U. T. System or University rules, specific instructions issued by an administrative official or by federal, state, or local laws is subject to discipline, whether such conduct takes place on or off-campus or whether civil or criminal penalties are also imposed for such conduct.

### Course Netiquette

All correspondence with your instructor, TA, and other students should be conducted in an appropriate and professional manner. Please be considerate of your tone and word choice when conducting correspondence.

### Accommodations

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodation will be made unless it is determined that doing so would cause undue hardship on the University. Students

requesting accommodation based on a disability must register with the UTEP Center for Accommodations and Support Services (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at [cass@utep.edu](mailto:cass@utep.edu) , or apply for accommodation online via the CASS portal.

### COVID-19 Precautions

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodation. If you have tested positive for COVID-19, you are encouraged to report your results to [covidaction@utep.edu](mailto:covidaction@utep.edu), so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID 19 testing.

The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of Miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area, and will be available at no charge on campus during the first week of classes. For more information about the current rates, testing, and vaccinations, please visit [epstrong.org](http://epstrong.org)

Please contact me immediately if you fall ill during the semester so that we can work together to formulate a strategy to help you get caught up as soon as you are physically able.

### Military

If you are a military student, or a military affiliated student, thank you for your service and/or thank you for sharing your family member with the country. If you have the potential of being called to military service or training during the semester, you are encouraged to contact me as soon as you receive your orders so that we can make appropriate arrangements.

## Copyright

### Course Materials

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

### Class Recordings

The use of recordings will enable you to have access to class lectures, group discussions, and so on in the event you miss a synchronous or in-person class meeting due to illness or other extenuating circumstance. Our use of such technology is governed by the Federal Educational Rights and Privacy Act (FERPA) and UTEP's acceptable-use policy. A recording of class sessions will be kept and stored by UTEP, in accordance with FERPA and UTEP policies. Your instructor will not share the recordings of your class activities outside of course participants, which include your fellow students, teaching assistants, or graduate assistants, and any guest faculty or community-based learning partners with whom we may engage during a class session. You may not share recordings outside of this course. Doing so may result in disciplinary action.

## COURSE RESOURCES

Where you can go for assistance as UTEP provides a variety of student services and support:

### Academic and Technology Resources

- [\*\*Help Desk\*\*](#): Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus, Academic Resources.
- [\*\*UTEP Library\*\*](#): Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- [\*\*Math Tutoring Center \(MaRCS\)\*\*](#): Ask a tutor for help and explore other available math resources.

## Individual Resources

- [\*\*Military Student Success Center\*\*](#): Assists personnel in any branch of service to reach their educational goals.
- [\*\*Center for Accommodations and Support Services\*\*](#): Assists students with ADA-related accommodations for coursework, housing, and internships.
- [\*\*Counseling and Psychological Services\*\*](#): Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.

## Tentative Course Schedule

\*Subject to change with notice

Week	Date	Lecture	Due Date
1	16-Jan	NO CLASS - MLK, Jr Day	
	18-Jan	5.1 Matrix Addition and Scalar Multiplication	23-Jan
2	23-Jan	5.2 Matrix Multiplication	27-Jan
	25-Jan	5.3 Matrix Inversion	30-Jan
3	30-Jan	Chapter 5 Quiz	31-Jan
	1-Feb	10.1 Limits - Numerical and Graphical Viewpoint	6-Feb
4	6-Feb	10.2 Limits - Algebraic Viewpoint	10-Feb
	8-Feb	10.3 Limits and Continuity	13-Feb
5	13-Feb	10.4 Average Rate of Change	17-Feb
	15-Feb	10.5 Derivatives - Numerical and Graphical	20-Feb
6	20-Feb	10.6 Derivatives - Algebraically	24-Feb
	22-Feb	Chapter 10 Quiz	27-Feb
7	27-Feb	No Class, use the time for Ch 10 Quiz	3-Mar
	1-Mar	11.1 Derivatives of Powers, Sums, and Constant Multiples	6-Mar
8	6-Mar	11.2 Marginal Analysis	10-Mar
	8-Mar	11.3 Product and Quotient Rule	20-Mar
Spring Break	13-Mar		
	15-Mar		
9	20-Mar	11.4 Chain Rule	24-Mar
	22-Mar	11.5 Derivatives of Logarithmic and Exponential Functions	27-Mar
10	27-Mar	Chapter 11 Quiz	28-Mar
	29-Mar	12.1 Maxima and Minima	3-Apr
11	3-Apr	12.2 Applications of Maxima and Minima	7-Apr
	5-Apr	12.3 Acceleration and Concavity	10-Apr
12	10-Apr	Chapter 12 Quiz	11-Apr
	12-Apr	13.1 Indefinite Integral	17-Apr
13	17-Apr	13.2 Integration with substitution	21-Apr
	19-Apr	13.4 Definite Integrals Algebraically	24-Apr
14	24-Apr	Chapter 13 Quiz	25-Apr
	26-Apr	14.1 Integration by parts	1-May
15	1-May	14.3 Averages and Moving Averages	4-May
	3-May	Chapter 14 Quiz	4-May
16	8-May	Final Exam Opens	8-May
	10-May	Final Exam Closes	10-May