

Math 5321/4341: Principles of Analysis/Real Analysis (Asynchronous ON LINE class)
CRN: 15244/15245
Fall 2020
Dr. B. D. Rouhani
behzad@utep.edu
(915)747-6767

Prerequisite Courses

Math 3341 (Introduction to Analysis)

COURSE DESCRIPTION, OBJECTIVES and EXPECTED LEARNING OUTCOMES

The main objective of Math 5321 (or Math 4341) is to continue after Math 3341 to build your knowledge of basic concepts, principles, and theorems in Analysis, in such a way that by the end of the course you would have acquired all the basic knowledge necessary for undergraduate analysis, as well as being prepared to take more advanced graduate courses in Analysis. In particular, analysis on function spaces, which are therefore infinite dimensional, will be of particular importance.

REQUIRED MATERIALS

The textbook is: Walter Rudin, Principles of Mathematical Analysis, Third Edition, Mc Graw-Hill, 1976.

Besides Amazon and other online vendors, the UTEP bookstore has this book.

You will also need regular access to a computer, stable, consistent internet, Blackboard, and your UTEP email account.

COURSE ASSIGNMENTS AND GRADING

Assignments for this course consist of Homework (HW) (which are the exercises at the end of each chapter), and four tests respectively on chapters 2, 3, 6 and 7 covered from the book, as well as a final project (recommended to be done in groups of 2, 3, or at most 4 students together) that needs to be completed and submitted by the end of the course, as specified in the course calendar. HW will not be graded and is for your own understanding of the course material. However, it is strongly recommended that you diligently work all the HW problems, as your test problems will either be the same or similar to your HW problems. All tests are open book, and they are available on the appropriate Mondays specified in your course calendar on Blackboard, only from 4:30 PM to 7:30 PM (MST), for you to open and post either the picture or the pdf file of your solution on Blackboard before 7:30 PM (MST). If not, the corresponding grade will be counted as zero. No exception or excuse to this rule will be accepted.

Please make sure you understand that when posting your solution, the most important things are the details and your explanations on how you get your solution to the problem and not just the answer to the problem.

Grading Policy:

The usual grading scale will be used for this course (90 or above corresponds to an A, 80 to 89 is a B, 70 to 79 is a C, 60 to 69 is a D, below 60 is an F).

Each test has a weight of 100 points, and your final grade G will be 0.8 times the average T of all your 4 tests, plus 0.2 times the grade P Of your final project. That is: $G = (0.8) T + (0.2) P$.

ATTENDANCE POLICY

Because this is an online course, attendance is determined by class participation online. Participation is determined by completion of the following activities:

- Reading/Viewing all course materials to ensure understanding of assignment requirements
- Participating in engaging discussion with your peers on the Discussion Boards (grading rubric provided in the “grading information” area of each forum)
- Completing all Module Activities (HW assignments, quizzes, comprehensive final exam)
- Completing all Major Assignments

To preserve a student’s GPA, he/she WILL be dropped from the course for failure to turn in two or more assignments.

TECHNOLOGY REQUIREMENTS

Course content is delivered via the Internet through the Blackboard learning management system (LMS). Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Mozilla Firefox and Google Chrome are the most supported browsers for Blackboard; other browsers may cause complications with the LMS. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You will need to have or have access to a computer/laptop, scanner, a webcam, and a microphone. You will need to download or update the following software: Microsoft Office, Adobe, Flashplayer, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you encounter technical difficulties beyond your scope of troubleshooting, please contact the [Help Desk](#) as they are trained specifically in assisting with technological needs of students.

NETIQUETTE

- Always consider audience. Remember that members of the class and the instructor will be reading any postings.
- Respect and courtesy must be provided to classmates and to instructor at all times. No harassment or inappropriate postings will be tolerated.
- When reacting to someone else's message, address the ideas, not the person. Post only what anyone would comfortably state in a F2F situation.
- Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space. If students wish to do so, they have the ethical obligation to first request the permission of the writer(s).

LATE WORK POLICY

All tests are open book, and they are available on the corresponding Monday as specified in your course calendar on Blackboard, only from 4:30 PM to 7:30 PM (MST), for you to open and post either the picture or the pdf file of your solution on Blackboard before 7:30 PM (MST).

The titles of your projects and the groups of students you are working together should be E-mailed to me before Wednesday, October 28, at 6:00 PM (MST).

The pdf files of your final projects (properly typed) should be E-mailed to me before Wednesday, December 2, at 6:00 PM (MST).

If not, the corresponding grade will be counted as zero.

No exception or excuse to this rule will be accepted.

DROP POLICY

To drop this class, please contact the [Registrar's Office](#) to initiate the drop process. If you cannot complete this course for whatever reason, please contact me. If you do not, you are at risk of receiving an F for the course.

Any student not respecting or following the rules of this syllabus may be dropped from the class list with an "F".

ACCOMMODATIONS POLICY

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 accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services](#).

SCHOLASTIC INTEGRITY

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more [HOOP: Student Conduct and Discipline](#).

STUDENT RESOURCES

UTEP provides a variety of student services and support:

- [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.
- [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.
- [University Writing Center \(UWC\)](#): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- [Math Tutoring Center \(MaRCS\)](#): Ask a tutor for help and explore other available math resources.
- [History Tutoring Center \(HTC\)](#): Receive assistance with writing history papers, get help from a tutor and explore other history resources.
- [Military Student Success Center](#): UTEP welcomes military-affiliated students to its degree programs, and the Military

Student Success Center and its dedicated staff (many of whom are veterans and students themselves) are here to help personnel in any branch of service to reach their educational goals.

- [RefWorks](#): A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.