

THE UNIVERSITY OF TEXAS AT EL PASO

COLLEGE OF SCIENCE

DEPARTMENT OF MATHEMATICAL SCIENCES

Course #: Math 5370, CRN 26411

Course Title: Numerical Analysis

Credit Hrs: 3

Term: Spring 2022

Course Meetings & Location: None – course is entirely online via Blackboard.

Prerequisite Courses: MATH 3323

Instructor: Andrew Pownuk

Office Location: Bell Hall 144

Contact Info: Phone # 915 747-6773

E-mail address: ampownuk@utep.edu

<http://www.math.utep.edu/Faculty/ampownuk/>

Office Hrs: MW 12.30 pm-1.30 pm, Bell Hall 144

or

<https://utep-edu.zoom.us/j/7794325720>

Textbook(s), Materials: Required: Numerical Analysis: Mathematics of Scientific Computing, Third Edition, by David Kincaid and Ward Cheney.

Course Objectives (Learning Outcomes): Introduction to approximation theory, interpolation, numerical differentiation and integration, solutions of linear and non-linear equations, numerical solution of differential equations, optimization. Error, stability and complexity analysis will be done for many of the algorithms presented. Numerous practical examples and computer programs will be covered.

Course Activities/Assignments: Online notes, assignments and grades can be found on Blackboard.

Assessment of Course Objectives: Homework, tests, final exam.

Grading Policy: $f_g = 0.6 \cdot \overline{test} + 0.1 \cdot \overline{homework} + 0.3 \cdot final$

\overline{test} - average grade from tests.

$\overline{homework}$ - average grade from homework.

$final$ - final exam

**The Drop Date for this semester is April 1th, 2022 before 5:00 PM.
No drops will be approved after this date or time.**

Civility Statement: All correspondence with your instructor, TA, and other students should be conducted in an appropriate manner.

Military Statement: If you are a military student with the potential of being called to military service and /or training during the course of the semester, you must contact me as soon as possible before you leave.

Disability Statement: If you need accommodations for your success, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email at cass@utep.edu, or visit their office located in the UTEP Union East, Room 106. For additional information, please visit the CASS website <https://www.utep.edu/student-affairs/cass/>

The student is responsible for informing me of the accommodations needed and will be responsible for proactive actions in regards to having accommodations met.

Academic Integrity Policy: 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, any act designed to give unfair advantage to a student or the attempt to commit such acts. For the official policies on academic integrity and scholastic dishonesty, please refer to <https://admin.utep.edu/Default.aspx?alias=admin.utep.edu/hoop>

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, to comply with the Regents' [Rules and Regulations](#), with System and University rules, with directives issued by an administrative official in the course of his or her authorized duties, and to 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.

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 accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to 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

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.