

THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
DEPARTMENT OF MATHEMATICAL SCIENCES

Course Number: MATH 5365-28162

Course Title: Technology in the Mathematics Classroom

Credit Hrs: 3

Term: Spring 2020

Course Meetings & Location: Tuesdays & Thursdays 6:30PM – 7:50PM
Bell Hall 130

Prerequisite Courses: Departmental Approval

Course Fee: (if applicable) None

Instructor: Kien Lim

Office Location: Bell Hall 301

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Office Hours: Tuesdays: 3:00 PM – 4:15 PM
By Appointments

Course Description An introduction to technology used in mathematics education such as graphing calculators, computer algebra systems, course specific software and the use of the internet, and an exploration of its appropriate and effective use in the mathematics classroom.

Textbook(s), Materials: Required Text:
Focus in High School Mathematics: Technology to Support Reasoning and Sense Making, Dick, T. P. & Hollebrands, K. F. (2011) Reston, VA: NCTM. ISBN 978-0-87353-674-5

Recommended Text:
2005 NCTM Yearbook: Technology-supported mathematics learning environments, W. J. Masalski (Ed.). Reston, VA: NCTM . ISBN 978-0-87353-569-3

Materials Required During Class:

- A graphing calculator
- A smartphone or a tablet with internet access

- Course Objectives:** Students will
- recognize different types of technology and their roles in mathematical teaching and learning
 - enhance their ability to use technology in their classroom to support mathematical thinking and conceptual understanding
 - understand the affordances and limitations of various technological tools
 - explore, analyze, and discuss issues, tradeoffs, pitfalls, and logistics associated with use of a technological tool
 - be familiar with some guidelines for choosing and using interactive technologies

Activities/Assignments: Students will participate in in-class activities, read assigned articles, turn-in homework assignments via Blackboard, prepare for quizzes and exams, work on individual/group projects, and make presentations.

- Assessment:**
- Assignments are due via *Blackboard* on Sundays at 11pm. They will be graded based on effort and understanding. Late work will not be accepted.
 - Your comprehension of the assigned readings and ideas discussed in class will be assessed via mid-term exam and quizzes.
 - Projects are opportunities for you to showcase your knowledge and creativity in using specific technological tools to foster mathematical thinking and conceptual understanding.

Important Dates: Census Day (Last day to drop without a “W”) Feb 5
Course Drop Deadline (Last day to drop with a “W”) Apr 3

Grading Policy:

Homework Assignments	20%
Quizzes & Exams	20%
Projects & Presentations	60%

- Make-up Policy:**
- There will be no make-up for assignments and assessments. The lowest score of your assignments and the lowest score of your quizzes will be dropped to allow for one missed assignment/assessment.
 - If you should miss the exam, the possibility of a make-up will be determined on an individual basis. If you cannot provide documentation to support your reason, your exam grade will be counted as the missed-exam grade.

Attendance Policy: Attendance will be taken.

Incomplete Policy: All grades of Incomplete must be accompanied by an Incomplete Contract that has been signed by the instructor of record, student, departmental chair, and the dean. The College of Science allows a period of one month to complete this contract. A grade of Incomplete is only used in extraordinary circumstances confined to a limited event such as a missed exam, project, or lab. If the student has missed a significant amount of work (e.g. multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.

Academic Integrity Policy: Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, 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. Refer to the UTEP's Policy at <http://sa.utep.edu/osccr/academic-integrity/>.

Civility Statement: Be punctual. If you are late for class you will not be given extra time to complete your quiz and 20% of your score will be deducted.

Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

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, please inform your instructor as soon as possible.