

Departmental Course Syllabus



MAT 123

Contemporary College Mathematics

3 credit hours

3 contact hours (3 lecture hours, 0 lab hours)

Catalog Description This course provides an appreciation and understanding of the mathematics underlying several topics in contemporary society. Topics may include voting methods, apportionment problems, Euler and Hamilton circuits, population growth, and fractals.

Prerequisite MAT 102 or appropriate placement score

What will I learn? At the end of this course, you should be able to (depending on the topics included in your course):

1. Determine the winner of preference balloting, given the voting method.
2. Solve apportionment problems, given the determination method.
3. Solve graph theory problems dealing with Euler and Hamilton circuits.
4. Project population growth based on linear, exponential and logistic models.
5. Solve problems dealing with the Koch snowflake, the Sierpinski gasket, and the Mandelbrot set.

Textbook and Required Materials

Excursions in Modern Mathematics by Peter Tannenbaum and Robert Arnold (7th ed., Prentice Hall)

Scientific calculator such as the TI-34II.

Grading System and Policy The College-wide grading scale is

91-100 = A, 81-90 = B, 71-80 = C, 65-70 = D, below 65 = F

There will be a comprehensive departmental final exam, which everyone must take (no exemptions), and which counts 25% of the final grade. The remaining 75% will be specified by your instructor's syllabus addendum.

Attendance/ Withdrawal Before attending classes, you must meet all prerequisites and officially register for all courses. Prompt and regular attendance is your responsibility. You are responsible for all material covered and all assignments made in class. Any time you are absent from a class, laboratory or other scheduled events, it is your responsibility to make satisfactory arrangements for any make-up work permitted by the instructor.

An absence is defined as nonattendance for any reason, including illness, emergency or official leave. If you arrive late to class, you may not be allowed into the classroom and may be considered absent for that period. If you leave before the instructor dismisses class, you may also be considered absent. All class sessions are important. Any time you miss a class you increase your risk of making a failing grade. If you quit coming or participating in the course and do not officially withdraw by the withdrawal date for each semester, you will receive a grade of F. Your instructor cannot assign a grade of W. If you receive financial aid or veterans' aid, your aid may be revised as a result of any changes in your course schedule.

Instructor availability Your instructor is available to you outside of class for academic assistance. Full-time faculty members maintain and post regularly scheduled office hours. Part-time faculty members are accessible in a variety of ways, which may include conferences before and after class or by appointment, telephone conferences, and E-mail. The phone number for reaching your instructor is provided on your syllabus addendum.

See your syllabus addendum This is a departmental syllabus for all sections of the course. As such, it tries to address issues common to all sections. There will be issues (grading details, office hours, and the like) that are specific to your section, and these details will be covered in an addendum issued by your instructor.

Classroom Civility: Student learning is a top priority. Students are expected to come to class prepared and attentive. To ensure a productive learning environment, students must show courtesy and respect to their instructors and fellow students. Instructors will not tolerate uncivil or disruptive behavior. The instructor may dismiss a disruptive student from the class for the remainder of the class period. If inappropriate behavior persists, the instructor may refer the student to the Vice President for Student Services for disciplinary evaluation.

Electronic Communication Devices in Classrooms: To minimize classroom disruptions and protect the integrity of test-taking situations, activated electronic communication devices such as pagers and cell phones are generally not permitted in classrooms at Trident Technical College. The only exception to this policy will be for on-call emergency personnel (police, fire, EMS), who will be required to notify their classroom instructor of their need for such devices and provide documentation verifying their occupation. However, on-call emergency personnel may not leave a testing situation; communicate by electronic means and return to complete an examination. In these cases, instructors should make arrangements for re-testing. Use of electronic devices for note taking is at the discretion of the instructor.

For Students Enrolled in Online or Other Distance-Learning Sections

To confirm that you are actively involved in this course you need to contact the instructor at least once per week. Forms of contact can include (but are not limited to) posting/receiving emails, participating in online class discussions or chat rooms, and completing and submitting course assignments. Please see the instructor's addendum for any additional instructions.

ADA Statement The College will make reasonable accommodations for persons with documented disabilities. Students with disabilities should notify Services for Students with Disabilities (located in the Student Success Center) and their instructors of any special needs. Instructors should be notified on the first day of classes.

Textbook Portions Covered

Unit 1	The Mathematics of Social Choice	Ch. 1-4
Unit 2	Management Science	Ch. 5-8
Unit 3	Growth and Symmetry	Ch. 9-12

College Information TTC uses Campus Cruiser e-mail as the standard communication system to send information to students and uses TTC Express to post final course grades. To access your accounts go to www.tridenttech.edu.

Department Head Samantha Hodges at 574-6754

Division Admin. Asst. 574-6015 (emergencies only)