



MAT 155

Contemporary Mathematics

3 credit hours

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

Catalog Description *This course includes techniques and applications of the following topics: properties of and operations with real numbers, elementary algebra, applied geometry, measurement, graph sketching and interpretations, and descriptive statistics.*

Prerequisite MAT 032 or appropriate placement test score

Textbook and Required Materials

Thinking Mathematically by Blitzer (5th Ed., Pearson, 2111 or custom pub text for TTC)

A calculator that will evaluate square roots and exponents. (TI89/92 or equivalent are not allowed!)

Core Curriculum Competencies

All courses approved for the general education core curriculum develop a student's critical thinking and/or communication skills.

This course develops critical thinking skills through instruction that emphasizes the understanding of mathematical concepts and the ability to apply these concepts to solving a problem. This will be demonstrated by assessments at the end of each unit and on the common final exam. The student will demonstrate the following critical thinking objectives:

- Solve linear equations and evaluate algebraic expressions, using mathematic principles in a logical process.
- Interpret graphs of data and find major descriptive statistical measures for sets of data using mathematical principles in a logical process.
- Use scientific notation to evaluate expressions, convert between metric and English measures, and compute simple and compound interest using mathematical principles in a logical process.

This course develops communication skills through instruction that emphasizes the presentation of mathematical ideas in appropriate, clear, and precise mathematical language. The student will demonstrate the following communication objectives:

- Graph linear functions, interpret the graphs, and explain their properties using clear, appropriate, and precise mathematical symbols and terminology.
- Explain solutions to problems listed above using clear, appropriate, and precise mathematical symbols and terminology.

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/ Withdrawals 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.

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.

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.

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.

Topics Covered

- I. Number Theory, including order of operations and evaluating expressions, rational numbers, properties of real numbers, scientific notation and decimal notation, and calculations with these.
Sections: 5.2, 5.3, 5.5, 5.6
- II. Elementary Algebra, including evaluating expressions, solving linear equations, ratios, proportions, and graphing linear equations.
Sections: 6.1, 6.2, 6.3, 7.1, 7.2
- III. Consumer Math & and Descriptive Statistics
Sections: 8.1, 8.2, 8.3, 12.1 – 12.3
- IV. Metric System, Similar triangles, Polygons, Perimeter, Area, Surface Area, Volume
Sections: 9.1 – 9.3, 10.1 – 10.5

College Information TTC uses email 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.

Supplementary Help Extra help is available in The Learning Center (920 bldg, rm 211).

Access to computers for academic courses The College has computer labs available for student use on all three campuses. Students who experience problems with home computers should plan to accomplish their assignments at the college.

Department Head Elizabeth White at 574-6538
Division Admin. Asst. 574-6015 (emergencies only)

Last revised 8/16/11