MATH 1332- [section number]   [Instructor Name]
Synonym: [insert]   [Instructor ACC Phone]
[Time], [Campus] [Room]   [Instructor email]
[Semester]

[Instructor web page, if applicable]
[Instructor Office]
Office Hours: [day, time]
Other hours by appointment

Required Text: Excursions in Modern Mathematics, Peter Tannenbaum, 7th edition (ISBN 13: 978-0-321-56803-8)

Optional Text: Student Resource Guide (ISBN 13: 978-0-321-57519-7)

Technology: You will need a scientific or business calculator; it should have a y^x or x^y key and a square root key. Graphing calculators are fine but not necessary. You may be working in a computer lab depending on availability and the instructor's discretion.

Course Description: A course designed for non-mathematics and non-science majors. Topics may include, but are not limited to, sets, logic, number theory, geometric concepts, and an introduction to probability and statistics.

Prerequisite: Students who have satisfied the TSI math requirement by passing the THEA, COMPASS, or ASSET, or by ACC courses have satisfied the math prerequisite requirement for this course. A student who is exempt from TSI or satisfied the TSI requirement is another way must also pass one of those tests unless he or she has passed high school Algebra II to satisfy the prerequisite. The new MATD 0385 is specifically designed to prepare students for 1332, 1333, and 1342.

Course Rationale: This course is intended to provide non-mathematics and non-science majors with a survey of topics in mathematics. The emphasis may be towards developing students' quantitative reasoning skills, illustrating the beauty of mathematics as a discipline, and/or imparting a feel for the different ways in which mathematics is used. The students who take this course generally are in nursing, the liberal arts, communication, workforce programs, or some social sciences. This course may be used to satisfy the Core Curriculum and the General Education Mathematics requirements.

Course Objectives: 1) Increase/improve your quantitative literacy. 2) Provide you with an opportunity to experience mathematics as an intellectual exercise and a way of thinking. 3) Provide you with an opportunity to appreciate the visual and intellectual beauty of mathematics.

Instructional Methodology: This course is taught in the classroom primarily as a lecture/discussion course.

Student Learning Outcomes:
Upon successful completion of this course, the student will:

1. Apply arithmetic, algebraic, geometric, critical thinking, and statistical methods to modeling and solving real world situations. The student will demonstrate this by some of the following:
   (a) The student will analyze and determine the outcome of an election given preferential voting ballots.
   (b) The student will solve equations for unknown variables involving simple and compound interest.
   (c) The student will analyze the cost of a loan or annuity.
   (d) The student will solve problems using dimensional analysis.

2. Present and evaluate basic mathematical information verbally, numerically, graphically, and symbolically. The student will demonstrate this by some of the following:
   (a) The student will apply statistical methods to describe data numerically and present data graphically.
   (b) The student will use Venn diagrams to either determine the validity of a logical argument or display relationships between groups.

3. Interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them. The student will demonstrate this by some of the following:
   (a) The student will recognize, examine, and interpret a graph model of a routing problem and find the optimal solution using an appropriately chosen algorithm.
   (b) The student will recognize, examine, and interpret bar graphs, histograms, pie charts and box plots.
   (c) The student will understand the mathematical difference between causation and correlation.

4. Understand that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines. The student will demonstrate this by some of the following:
   (a) The student will apply mathematical techniques discovered within the last 100 years to solve problems of social science and management science.
   (b) The student will express in writing their understandings of how mathematics is involved in diverse areas such as art, architecture, music, and nature.
   (c) The student will use ideas from probability to understand gambling and risk.

General Education Competencies:
Upon completion of the general education component of an associate's degree, students will demonstrate competence in:
Civic Awareness: Analyzing and critiquing competing perspectives in a democratic society.
Critical Thinking: Gathering, analyzing, synthesizing, evaluating and applying information.
Cultural Awareness: Comparing, contrasting, and interpreting differences and commonalities among peoples, ideas, aesthetic traditions, and cultural practices.
Ethical Reasoning: Identifying and applying ethical principles and practices.
Interpersonal Skills: Interacting collaboratively to achieve common goals.
Life/Personal Skills: Demonstrating effective learning, creative thinking, and personal responsibility.
Quantitative and Empirical Reasoning: Applying mathematical, logical and scientific principles and methods.
Technology Skills: Using appropriate technology to retrieve, manage, analyze, and present information.
Written, Oral and Visual Communication: Communicating effectively, adapting to purpose, structure, audience, and medium

Time: You cannot learn mathematics by listening to someone talk about it. You learn math by thinking about and working on mathematical problems. And this takes **time**. If you allow yourself plenty of time to think about the material, you will find it much more interesting and enjoyable. A reasonable amount of time (for any college class, but especially for math) is three hours outside of class for every hour in class. You have made up your schedule this semester to include your classes at certain times every week. You should now include on that schedule certain regular hours for study—three hours of study for each hour you are in class. If you do not do this, you will not do as well in school as you are capable of, and you will find it more frustrating than it should be.

Course Evaluation/Grading Scheme: Grading criteria must be clearly explained in the syllabus. The criteria should specify the number of exams and other graded material (homework, assignments, projects, etc.). Instructors should discuss the format and administration of exams Guidelines for other graded materials, such as homework or projects, should also be included in the syllabus.

Course Policies
The syllabus should contain the following policies of the instructor:
* missed exam policy
* about late work (if applicable)
* class participation expectations
* reinstatement policy (if applicable)

General Policies and Info For ACC Students

Attendance/Class Participation: Regular and punctual class and laboratory attendance is expected of all students. If attendance or compliance with other course policies is unsatisfactory, the instructor may withdraw students from the class.

Withdrawal Policy: It is the responsibility of each student to ensure that his or her name is removed from the roll should he or she decide to withdraw from the class. The instructor does, however, reserve the right to drop a student should he or she feel it is necessary. If a student decides to withdraw, he or she should also verify that the withdrawal is submitted before the Final Withdrawal Date. The student is also strongly encouraged to retain their copy of the withdrawal form for their records.

Students who enroll for the third or subsequent time in a course taken since Fall 2002 may be charged a higher tuition rate for that course. State law permits students to withdraw from no more than six courses during their entire undergraduate career at Texas public colleges or universities. With certain exceptions, all course withdrawals automatically count towards this limit. Details regarding this policy can be found in the ACC college catalog.

Incomplete Grades: An instructor may award a grade of "I" (Incomplete) if a student was unable to complete all of the objectives for the passing grade in a course. An incomplete grade cannot be carried beyond the established date in the following semester. The completion date is determined by the instructor but may not be later than the final deadline for withdrawal in the subsequent semester.

Statement on Scholastic Dishonesty: A student attending ACC assumes responsibility for conduct compatible with the mission of the college as an educational institution. Students have the responsibility to submit coursework that is the result of their own thought, research, or self-expression. Students must follow all instructions given by faculty or designated college representatives when taking examinations, placement assessments, tests, quizzes, and evaluations. Actions constituting scholastic dishonesty include, but are not limited to, plagiarism, cheating, fabrication, collusion, and falsifying documents. Penalties for scholastic dishonesty will depend upon the nature of the violation and may range from lowering a grade on one assignment to an "F" in the course and/or expulsion from the college. See the Student Standards of Conduct and Disciplinary Process and other policies at http://www.austincc.edu/current/needtoknow

Student Rights and Responsibilities: Students at the college have the rights accorded by the U.S. Constitution to freedom of speech, peaceful assembly, petition, and association. These rights carry with them the responsibility to accord the same rights to others in the college community and not to interfere with or disrupt the educational process. Opportunity for students to examine and question pertinent data and assumptions of a given discipline, guided by the evidence of scholarly research, is appropriate in a learning environment. This concept is accompanied by an equally demanding concept of responsibility on the part of the student. As willing partners in learning, students must comply with college rules and procedures.

Statement on Students with Disabilities: Each ACC campus offers support services for students with documented disabilities. Students with disabilities who need classroom, academic or other accommodations must request them through the Office for Students with Disabilities (OSD). Students are encouraged to request accommodations when they register for courses or at least three weeks before the start of the semester, otherwise the provision of accommodations may be delayed.

Students who have received approval for accommodations from OSD for this course must provide the instructor with the 'Notice of Approved Accommodations' from OSD before accommodations will be provided. Arrangements for academic accommodations can only be made after the instructor receives the 'Notice of Approved Accommodations' from the student.

Students with approved accommodations are encouraged to submit the 'Notice of Approved Accommodations' to the instructor at the beginning of the semester because a reasonable amount of time may be needed to prepare and arrange for the accommodations. Additional information about the Office for Students with Disabilities is available at http://www.austincc.edu/support/osd/

Safety Statement: Austin Community College is committed to providing a safe and healthy environment for study and work. You are expected to learn and comply with ACC environmental, health and safety procedures and agree to follow ACC safety policies. Additional information on these can be found at http://www.austincc.edu/ehs. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the Emergency Procedures poster and Campus Safety Plan map in each classroom. Additional information about emergency procedures and how to sign up for ACC Emergency Alerts to be notified in the event of a serious emergency can be found at http://www.austincc.edu/emergency/. Please note, you are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities. You are expected to conduct yourself professionally with respect and courtesy to all. Anyone who thoughtlessly or intentionally jeopardizes the health or safety of another individual will be immediately dismissed from the day's activity, may be withdrawn from the class, and/or barred from attending future activities.

Use of ACC email: All College e-mail communication to students will be sent solely to the student's ACCmail account, with the expectation that such communications will be read in a timely fashion. ACC will send important information and will notify you of any college related emergencies using this account. Students should only expect to receive email communication from their instructor using this account. Likewise, students should use their ACCmail account when communicating with instructors and staff. Instructions for activating an ACCmail account can be found at http://www.austincc.edu/accmail/index.php.

Testing Center Policy: Under certain circumstances, an instructor may have students take an examination in a testing center. Students using the Academic Testing Center must govern themselves according to the Student Guide for Use of ACC Testing Centers and should read the entire guide before going to take the exam. To request an exam, one must have:

1. **ACC Photo ID**
2. **Course Abbreviation (e.g., ENGL)**
3. **Course Number (e.g.,1301)**
4. **Course Synonym (e.g., 10123)**
5. **Course Section (e.g., 005)**
6. **Instructor's Name**

Do NOT bring cell phones to the Testing Center. Having your cell phone in the testing room, **regardless of whether it is on or off**, will revoke your testing privileges for the remainder of the semester. ACC Testing Center policies can be found at http://www.austincc.edu/testctr/

Student And Instructional Services: ACC strives to provide exemplary support to its students and offers a broad variety of opportunities and services. Information on these services and support systems is available at: http://www.austincc.edu/s4/

Links to many student services and other information can be found at: http://www.austincc.edu/current/

ACC Learning Labs provide free tutoring services to all ACC students currently enrolled in the course to be tutored. The tutor schedule for each Learning Lab may be found at: http://www.autincc.edu/tutor/students/tutoring.php

For help setting up your ACCeID, ACC Gmail, or ACC Blackboard, see a Learning Lab Technician at any ACC Learning

*Additional information about ACC's mathematics curriculum and faculty is available online at http://www.austincc.edu/math/ .

Tannenbaum Calendar:

Week	**16-week** Chapters	**11-week** Chapters	**5.5-week** Chapters
1	Ch 1	Ch 1	Ch 1, Ch 2
2	Ch 1, Ch 2	Ch 2	Test 1, Ch 5, Ch 6
3	Ch 2	Test 1, Ch 5	Ch 6, Test 2, Ch. 9
4	Test 1, Ch 5	Ch 5, Ch 6	Ch 10, Test 3, Ch 13
5	Ch 5	Ch 6, Test 2	Ch 14, Ch. 16
6	Ch 5, Ch 6	Ch 9	Ch 16, Test 4
7	Ch 6	Ch 10	
8	Test 2, Ch 9	Test 3, Ch 13	
9	Ch 9	Ch 14	
10	Ch 10	Ch 14, Ch 16	
11	Ch 10	Ch 16, Test 4	
12	Test 3, Ch 13		
13	Ch 13, Ch 14		
14	Ch 14		
15	Ch 16		
16	Ch 16, Test 4		

Please note: schedule changes may occur during the semester. Any changes will be announced in class.