

Welcome to MATH 1332/MATD 0385 – Contemporary Math Express

A co-requisite combination of MATH 1332 Contemporary Mathematics and
MATD 0385 Contemporary Math Foundations

Semester Syllabus

Delete these instructions after following them: Instructors must make the following customizations:

- Change all highlighted text and remove highlights. Text highlighted in yellow should be customized; text highlighted in green is instructions that should be followed and then deleted.
- It is impossible to arrange the vertical spacing correctly on the master syllabus, as each instructor will be adding and deleting items. Consider starting each of the Level 1 Headings (The Basics, Course Calendar, Getting Help, Grades, Course Content, and The Details) at the top of a new page.
- In order to make the document accessible to screen readers, the master syllabus uses styles for text. The 6 styles in use are Title, Subtitle, Heading 1, Heading 2, Normal, and [hyperlink](#). If you would like to customize these styles with different fonts or formatting, please do so using Styles. Right click on the style you want to change and choose Modify.
- Please do not add tables without following accessibility procedures. Previous syllabi that contained critical information on the first page without a table do not meet accessibility requirements.

THE BASICS

About Your Instructors

Name: Insert info here

The best way to reach me is: Insert info here

Phone number: Insert info here

Email: Insert info here

Office location (and/or link if appropriate): Insert info here

Office hours: Insert info here

To schedule a conference outside of office hours: Insert info here

Name: Insert info here

The best way to reach me is: Insert info here

Phone number: Insert info here

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To schedule a conference outside of office hours: Insert info here

About Your Course

Instructional Methodology: Delete these instructions after following them: Choose the correct option and delete the other options

Classroom Section: This course is taught in the classroom primarily as a lecture/discussion course.

DLS—Synchronous Virtual Class Meetings Required: Instruction is fully online with required online meetings during the specified days and times listed.

ONL—Online: Instruction and testing are fully online without required class times.

HYC—Hybrid Classroom: Instruction is mostly on-campus with remaining instruction online.

MATD 0385 - Synonym: Insert info here **Section:** Insert info here

MATH 1332 - Synonym: Insert info here **Section:** Insert info here

Meeting location: Insert info here **Meeting times:** Insert info here

Prerequisites: NCBM 0222 with a C or higher. Or appropriate score on math TSI Assessment test.
Corequisite(s): MATH 1332.

Paired Course Policy: This is a paired course. Students who withdraw from MATD 0385 will automatically be withdrawn from MATH 1332.

Required Materials

This is a First Day™ class. The cost of required course materials, including an online version of the textbook and software access, has been added to your tuition and fees bill.

Textbook: *Using & Understanding Mathematics: A Quantitative Reasoning Approach*, 8th Edition by Bennett & Briggs. Pearson Publishing (MyLab software) ISBN-10: 0137575335, ISBN-13: 9780137575336

Supplemental Materials Needed: Scientific calculator; 3-ring binder recommended

Other Technology: Delete these instructions after following them: Delete webcam info if it does not apply; add any other needed technology.

Access to a webcam and microphone are required for this course. Eligible students can check out required technology at <https://www.austincc.edu/students/student-technology-services>.

COURSE CALENDAR

Delete these instructions after following them: This is the recommended 16-week calendar from the course committee. See the document “Suggested Course Calendars” for other options and customize this chart as appropriate.

Note: Schedule changes may occur during the semester. Any changes will be announced in class and posted as a Blackboard Announcement.

Week	Sections	Material
1	1.1 (0385), 1C	Careful Reading in Math, Sets and Venn Diagrams
2	1C, 1D, 2A	Sets and Venn Diagrams; Analyzing Arguments; Unit Analysis
3	2A, Review/Exam 1	Unit Analysis
4	Intro to Percents (0385), 3A	Uses and Abuses of Percentages
5	3A, 3B, 3D	Putting Numbers in Perspective; Index Numbers: The CPI and Beyond
6	3E, Review/Exam 2	How Numbers Can Deceive
7	1.5 (0385), 7A, 7B	Problem Solving Strategies, Fundamentals of Probability, Combining Probabilities
8	7C, 12A	The Law of Large Numbers; Voting: Does the Majority Always Rule?
9	12C, Review/Exam 3	Apportionment: The House of Representatives and Beyond
10	5A, 5B, 5C	Fundamentals of Statistics; Should You Believe a Statistical Study? Statistical Tables and Graphs
11	5E, 6A, 6B	Correlation and Causality; Characterizing Data; Measures of Variation
12	6C, Review/Exam 4	The Normal Distribution
13	4A	Taking Control of Your Finances; Linear/Exponential Growth
14	4B, 4C	The Power of Compounding; Savings Plans and Investments
15	4D, 4E	Loan Payments, Credit Cards, and Mortgages; Income Taxes
16	Review/Exam 5	Optional Projects

Important Dates

Last day to withdraw: Insert date here

Holidays: Insert ACC holidays for current semester

(Please note these are the **ONLY** holidays this semester.)

Making Time to Learn

We learn math by thinking about and working on mathematical problems, which takes time. Practice is crucial in a math course. To ensure that you have adequate time, set aside 8-12 hours per week outside of class time to practice and study for this course. Ask for help immediately when something isn't clear.

GETTING HELP

ACC provides several free resources for students who need help; descriptions and links are below:

Office hours: Another name for office hours is “student hours.” This is the time your instructor has set aside to answer student questions, so feel free to drop by if you have questions. Office hours may be virtual or on campus; see information above.

Instructional Associates: Instructional Associates specific to the course you are taking are available for tutoring. To make an appointment, go to <https://sites.google.com/a/austincc.edu/math-students/meet/list> and then click on your course.

Learning Labs: The ACC Learning Labs provide tutoring in math and other subjects. To schedule an appointment, go to <https://www.austincc.edu/students/learning-lab>. This site includes information about in person and virtual tutoring options.

Academic Coaching: Academic coaches offer extra support to students with study strategies; they want to help you learn to be an active participant in your own learning process. For more information or to make an appointment with an academic coach, go to <https://www.austincc.edu/students/academic-coaching>.

ACC Student Services: Services are offered in many areas, including Academic, Financial, Personal, and Technology Support. For more information, go to <https://www.austincc.edu/student-support>.

EXPECTATIONS

The Nature of This Course

This class will be different in many ways from your other math classes. You are NOT expected to memorize a lot of information, memorize steps for working a particular type of problem, or work the same kind of problem over and over. We won't do as much with the algebra rules you have learned in your other math classes, but we will study some topics more deeply and learn to think about mathematical concepts and ideas differently. You may not have experienced this kind of learning before, and that can be a little intimidating. However, students who haven't always enjoyed a typical algebra course usually enjoy the nature of this course since it is so different.

Why use group activities in Contemporary Math Express?

When an instructor prepares a math lecture, they have questions in mind that they ask the class as they work through examples. Because students process information in different ways and at different rates, it can be difficult for all students to follow a lecture. To give students more processing time, we have written our lectures out in activities. This way every student has time to really think about the question, form better connections between concepts, and practice writing out meaningful responses. In-class activities allow students to practice these skills before they are expected to do it on their own on an assignment. The more effort and thought you put into the activities, the more you will learn and be prepared for what is expected on assignments and exams.

How does working together help you learn Math?

Working together exposes you to other ideas you may not have considered. Also, it gives you an opportunity to pose questions to other students and to the instructor. Responding to questions from other students allows you an opportunity to express your explanations and justifications and check your own understanding of the content. Your instructor is always available to help clarify as you are working through the activities, so don't hesitate to ask for help.

Class Expectations

- You are expected to struggle through some complicated ideas with classmates and on your own to make more meaningful connections and synthesize ideas.

- You are expected to work with real-world scenarios and data, which means the numbers get messy.
- You are expected to talk with other students about your ideas and listen carefully to their ideas so you can learn to think through all kinds of different math problems.
- You are expected to spend a lot of time thinking more deeply about mathematical ideas, and to write about your thought process.
- You are expected to think through a problem and apply your knowledge to problems that you have never seen before.

GRADES

Delete these instructions after following them: Grading criteria should be clearly explained in the syllabus. The criteria should specify the number of exams and other graded material (exercises, term papers, homework, assignments, projects, etc.), and the weight assigned to them. **Instructors must include where students can access their grades.** Instructors should discuss the format of exams (multiple choice, short answer, essay, matching, combination, etc). Guidelines for other graded materials, such as homework or projects, should also be included in the syllabus. Having explicit detail in this section helps to more easily resolve issues with student grades should they arise. Links to grading and evaluation rubrics could also be included here. An example is given below; you should modify it to fit your course.

The same exams, quizzes, and homework are used to determine both the MATD 0385 and MATH 1332 grades. Only the weighting of the grade calculation is different.

MATH 1332 Grade Components

Delete these instructions after following them: The grade breakdown below was taken from the MATH 1332 course page. This section should be customized by the instructor-pair to reflect their course. Instructor-pairs must follow the MATH 1332 grading policies outlined on the MATH 1332 course page.

Major proctored assessments: 50 - 80%

Major unproctored assessments: 0 - 25%

Minor assessments: 10 - 25%

MATD 0385 Grade Components

Delete these instructions after following them: This weighting is used by all instructors to assign the MATD 0385 grade. The 40% grouped as “Major Unproctored Assessments/Quizzes/Homework” can be customized by the instructor-pair to meet the design of their courses.

Major Proctored Assessments: 50%

Major Unproctored Assessments/Minor Assessments: 40%

Group Work/Participation: 10%

Grading Scale

A: 90 - 100

B: 80 - 89

C: 70 – 79

D: 60 – 69

F: < 60

Where can I find my grades?

Grades will be posted in Blackboard.

What will we do in this class?

Tests: Insert info here

Homework: Insert info here Delete these instructions after following them: More information provided by instructor. If you chose to assign homework using MyLabMath (as per the MATH 1332 committee requirements outlined here: MATH 1332 Online Delivery Policies) be sure to include details in your syllabus.

Quizzes: Insert info here

Group work and participation: You are going to interact with each other quite a bit and talk to each other about math. There will be group activities every day in class. You are expected to be an active participant and contribute to the discussion of the problems on the group activities. Though you will be working with other students, everyone will record the work on their own paper. These will be your notes you will use to complete homework assignments, so you need to ask questions and make sure you understand the ideas in the activity.

I know that some of you do not like to talk in class and others like to talk a lot, so we will follow a couple of easy rules. We give everyone a chance to talk. We respond to whatever anyone says with respect. We are concerned here about concepts that will help you succeed in your college-level math courses and ultimately achieve your academic goals. You are all in the same boat; I expect that students in this class will support each other and be respectful when working together.

Delete these instructions after following them: Be sure to customize this part of the syllabus to reflect how the participation grade will be assessed for the MATD 0385 grade. See the [online MATH 0385 course delivery](#) page for more detail. Instructors may choose one of the following, or may choose to assess participation differently

- Your class activities will be collected after each exam.
- There will be periodic binder checks during class. Please have your completed class activities organized and ready.
- Your class activities will be checked every day during class.

Study Skills: A series of study skills activities will be incorporated into this course to help support your learning.

What happens if I miss something?

Dropped Grade Policy: Insert info here

Late Work Policy: Insert info here

Missed Exam Policy: Insert info here

Attendance Policy: Attendance is required in this course. Being more than 10 minutes late will count as an absence. Cutting out early without prior notification will count as an absence. Leaving more than 10 minutes early, even with prior notification, will count as an absence. Habitual tardiness or early departures amount to a lot of missed class time and will therefore also affect your attendance record. Students who miss 4 or more classes may be withdrawn from both MATH 1332 and MATD 0385 without warning. Warning: This is a paired course. Students are expected to remain enrolled in both portions of the course. Any exceptions to this policy must be approved by the instructor.

In the event the college or campus closes due to unforeseen circumstances (for example, severe weather or other emergency), the student is responsible for communicating with their professor during the closure and completing any assignments or other activities designated by their professor as a result of class sessions being missed.

COURSE CONTENT

Course Description

Credit Hours: 6, Contact Hours: 6

MATH 1332 - Contemporary Mathematics (3-3-0). A topics-based course, with a variety of possible topics chosen by individual instructors. The selected topics may include: sets, logic, number theory, geometry, probability and statistics, and the mathematics of finance and social choice. This course is not algebra-intensive, and is designed for non-technical majors.

MATD 0385 – Contemporary Math Foundations (3-3-0). A course designed to develop the skills, including reading and thinking, and the understanding needed for non-math, non-science majors who take MATH 1332. Topics include: linear and exponential models, data interpretations including graphs and tables, percentage models, order of operations, unit analysis, and logical reasoning. This course is not for college level credit. Students who require any other college level math course other than MATH 1332 should not take this course.

Course Rationale

MATH 1332: 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.

MATD 0385: This course is intended only for students concurrently enrolled in the paired section of MATH 1332 who are TSI-mandated to take Developmental Math. Students who do not wish to take MATH 1332 concurrently, or who require MATH 1342 Elementary Statistics, should enroll in MATD 0485 Developing Mathematical Thinking. Students who are mandated to take Developmental Math by the TSI rules may satisfy the TSI requirement by completing this course with a grade of C or better. Students who pass this course are not ready for MATH 1314 (College Algebra), MATH 1414 (College Algebra for Precalculus), or MATH 1324 (Math for Business and Economics). If your degree plan requires **MATH 1314 (College Algebra)**, **MATH 1414 (College Algebra for Precalculus)**, or **MATH 1324 (Math for Business & Economics)**, you will need to complete **MATD 0370 followed by the appropriate corequisite math courses** (lecture-based courses) or all 12 objectives of **MATD 0421** (personalized curriculum, computer-based course).

MATH 1332 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.

MATH 1332 Student Learning Outcomes

Upon successful completion of the course, a student should be able to:

- Apply the language and notation of sets.
- Determine the validity of an argument or statement and provide mathematical evidence.
- Solve problems in mathematics of finance.
- Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
- Interpret and analyze various representations of data.
- Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.
- Understand that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines.

MATD 0385 Course Objectives/Student Learning Outcomes

Upon successful completion of the course, a student should be able to:

1. Use a variety of problem-solving strategies to solve multiple-step problems using arithmetic and fundamental level algebraic techniques.
2. Solve application problems that require careful reading and the selection of the relevant information from a more extensive set of given information.
3. Use the basic logical operators to draw logical conclusions.
4. Appropriately use order of operations to evaluate numerical expressions on a scientific calculator.
5. Read data tables and graphs, and use the information to answer questions such as percent change.
6. Convert between various units of measurement, including square units.
7. Work percentage problems including developing exponential functions to reflect situations with a constant percentage of growth
8. Determine whether a set of data points or a verbal description models a linear or exponential function or does not model either.
9. Write equations to model linear and exponential data.

General Education Competencies

- Communication Skills: Develop, interpret, and express ideas and information through written, oral and visual communication that is adapted to purpose, structure, audience, and medium.
- Critical Thinking Skills: Gather, analyze, synthesize, evaluate and apply information for the purposes of innovation, inquiry, and creative thinking.

- **Empirical and Quantitative Skills:** Apply mathematical, logical and scientific principles and methods through the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

THE DETAILS

[Delete these instructions after following them: Remove the following two paragraphs if your class is not online]

Distance Education Information: This class is fully online. Successful online students actively participate in class on a regular basis just like in an on-campus class and avoid putting off classwork until the last minute. This includes reading assignments, taking quizzes and tests, and any other activities assigned by your professor. You will need to stay motivated and routinely log in to your classes in order to keep on top of your assignments.

Students will use the Blackboard learning management system for assignment instructions, submitting assignments, and collaboration. Students are encouraged to read ACC Distance Education General Information available at <https://online.austincc.edu/faq/>.

First Day Access: To enhance your learning experience and provide affordable access to the right course material, this course is part of an inclusive access model called First Day™. You can easily access the required materials for this course through Blackboard, at a discounted price, and benefit from single sign-on access. Austin Community College includes the discounted price as a course fee in your registration fees for this course.

It is NOT recommended that you Opt Out, as these materials are required to complete the course. You can choose to Opt Out on the first day of class, but you will be responsible for purchasing your course materials at the full retail price and access to your materials may be suspended. See your course in Blackboard for details.

Importance of Completing Developmental Course Requirements: The first steps to achieving any college academic goal are completing developmental course requirements and TSI requirements. The first priority for students who are required to take developmental courses must be the developmental courses. TSI rules state that students are allowed to take college credit courses, if they are fulfilling their developmental requirements. Because successful completion of developmental courses is so important, ACC will intervene with any student who is not successfully completing developmental requirements. This intervention can mean a hold on records, requiring developmental lab classes, working with the Instructional Associate, and monitoring during the semester.

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.

Reinstatement Policy: Students who withdrew or were withdrawn will not be reinstated unless they have completed all coursework, projects, and exams necessary to place them at the same level of course completion as the rest of the class. Reinstatement is up to the instructor's approval.

In-Progress Grade (MATD 0385 only): A student who is regularly attending, doing all assigned work but is still not earning a grade of C or higher, might be eligible for the IP (in progress) grade. An IP is a neutral grade with respect to the student's GPA (it is not counted), but it might be treated like a W (non-completion) for the purposes of financial aid. Students who receive an IP grade are expected to retake (register and pay for) the course in the next semester they are enrolled at ACC. Students may not receive more than 2 IPs in this course (or in any given developmental course.)

Incomplete Grade Policy: Incomplete grades (I) will be given only in very rare circumstances. Generally, to receive a grade of "I", a student must be up to date on coursework and have a passing grade, and after the last date to withdraw, have a legitimate reason that prevents course completion. 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.

Communication with Your Instructor: All e-mail communication to students will be sent solely to the student's ACCmail account or math software if applicable, with the expectation that such communications will be read in a timely fashion. Likewise, students should use their ACCmail account or math software when communicating with instructors. Instructors will respond to student emails within 3 business days, if no response has been received by the student at the end of that time, then the student should send a reminder to the instructor.

Name Change Information: If you want to change how your name appears online at ACC, go to <https://www.austincc.edu/admissions/update-student-information/chosen-name>.

General College Policies: Policies that apply to all courses at ACC can be found here: <https://www.austincc.edu/offices/academic-outcomes-assessment/master-syllabi/college-policies>.