

COURSE # MAT 1030

Quantitative Reasoning

*Year*

**Instructor**

**Instructor:**

**Phone:**

**Email:**

**Office Hours:**

**Course**

## Course Description

***This is a Concurrent Enrollment Course, offering both high school credit through \_\_\_\_\_\_\_\_\_\_\_\_\_\_ High School and college credit through Utah Valley University. Credit from this course is transferable to USHE colleges and universities. Contact the receiving institution for how the credits will be applied.***

**Catalog Description**

Teaches how to communicate, interpret, and analyze quantitative information found in the media and in everyday life to make sound personal, professional, and civic decisions.

**Course Prerequisites**

This class is available to all high school students in good academic standing. High school prerequisites apply.

* Complete Secondary Math 1, 2 and 3 courses with a C average each year.
* Students who complete Secondary math 1, 2 and 3 courses but did not earn a C average in all three courses, may be allowed to enroll based on a qualifying placement test score. Accepted placement tests include: ACT, ACT-R, or ALEKS.
* MATH 1030 requires an ACT or ACT-R math score of 21+.
* MATH 1030 requires an ALEKS score of ≥ 42

## Course Objectives or Learning Outcomes

This capstone math course is designed to present mathematical thinking as a tool for solving everyday problems. Emphasis is placed on authentic contexts, which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship.  It is intended to prepare students as consumers and as members of society to think critically about quantitative statements and to recognize when these statements are misleading or false. Upon completion of this course, students should be able to:

1. Explain real world information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words), including making reasonable predictions of trend data.

2. Convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words) that are appropriate and accurate.

3. Perform calculations that are sufficiently comprehensive and elegant (clear, concise, etc.) to solve authentic problems.

4. Analyze real world data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions.

5. Make and evaluate important assumptions in estimation, modeling, and data analysis using a compelling rationale for why each assumption is appropriate.

6. Express quantitative evidence in support of an argument or specific purpose (in terms of what evidence is used and how it is formatted, presented, and contextualized).

**Inclusion Statement**

“Come as you are. UVU has a place for you.”-- President Tuminez.

Your experience in this class is important to me, and it is my intent to create an inclusive and equitable climate to foster a safe and successful learning environment. Please feel free to contact me if you would like to talk about any suggestions and/or concerns. If that feels uncomfortable to you, you can also contact the [Inclusion and Diversity Committee](https://www.uvu.edu/inclusion/about/index.html) to ask for help and support.

**Required Text and Materials**

Combined Bennett, J. & Briggs, W. (2016). *A Quantitative Reasoning Approach: Mathematics Applied to Modern Life, Custom Edition for Utah Valley University.* Pearson Education, Inc. and Tannenbaum, P. (2018). Excursions in Modern Mathematics, 9th edition. Pearson Education, Inc.

**Alternative text**

Denley & Hall. (2016). *Viewing Life Mathematically: A Pathway to Quantitative Literacy. Hawkes Learning Systems, Inc. ISBN: 978-1-935782-05-6*

**Calculators:**

Each instructor has the right to allow students to use technology on homework assignments, quizzes, chapter tests and special projects. Technology includes, but not limited to, scientific calculators, graphing calculators, spreadsheets (ie. Excel or google sheets), etc. in this MAT 1030 course.

**Department Policies**

**Grade Distribution**

**Assignment Percentage**

Homework *Only indicate which ones you are using.*

Projects *10% [Required minimum*] *Delete the ones you are not using.*

In-class Activities

Quizzes

Chapter Tests

Mid-term

Final

**Total 100%**

**Assessment**

**Projects**

There will be \_\_ project(s) in this course to apply the content knowledge learned in the chapter. This (These) projects will be graded based on the rubric developed by the instructor. The projects will be worth *\_[at least 10%]\_%* of your overall grade.

**Assignments**

Homework may be collected in class at any time after the material has been covered. Homework turned in at any other time will be considered late.

**Quizzes/Class Activities**

Quizzes or class activities can be announced or unannounced and are part of your Quiz/Class Activities grade.

**Midterm/Final**

Midterm is optional. The final is written by the instructor.  There will be four common questions provided by the department for assessment purposes.  It is up to the instructor to assign a portion of the grade to those questions. Also, the final must be at least 25% of grade if no midterm is given and at least 20% if a midterm is given. If there are no other un-proctored exams (i.e. you use online exams, the minimum percentage that your overall proctored exam (final or both final and mid-term combined) must be at least 40%.

**Campus Resources**

**Advisors**

Please contact the First-Year Advising Center with any questions regarding placement or advising for your major. Visit <https://www.uvu.edu/firstyear/advising/> or contact the First-year Advising Center by phone, 801-863-8425, or by email at [firstyear@uvu.edu](mailto:firstyear@uvu.edu).

**Math Lab**

Free Math Help is available for all students in this class. Regular use of the Math Lab helps students get higher grades. The Math Lab is a great place to do your homework. If you get stuck, a tutor is available to help you understand the material.

**Locations and Hours:**

**[Please look at their website for updated schedule each semester.]**

West Math Lab (LA 201): Monday–Thursday 8:00am – 8:00pm, Friday 8:00am – 5:00pm, Saturday 10:00am – 3:00pm

East Math Lab (LA 207): Monday – Thursday 8:00am – 8:00pm, Friday 8:00am – 5:00pm

**Online Tutoring:**

Math tutoring is also available online at [uvu.upswing.io](https://uvu.upswing.io/). Online tutoring is available to all UVU students, it requires students to login with their UVID and password, and allows them to schedule 30- or 60-minute one-on-one or small group tutoring sessions with a tutor and utilizes either video, voice, or text based chat along with a digital whiteboard for students and tutors to do their work.

**Other Math Tutoring Locations:**

Math tutoring is available at Thanksgiving Point, Spanish Fork, and Wasatch Campus. Contact the Math Lab (801-863-8310) for more information.

**Grading Scale**

A = 100-93 B - = 82-80 D+ = 69-67

A - = 92-90 C+ = 79-77 D = 66-63

B+ = 89-87 C = 76-73 D - = 62-60

B = 86-83 C - = 72-70 F = 59-0

**Grades and Credit**

Your grade for this class will become part of your permanent college transcript and will affect your GPA. A low grade in this course can affect college acceptance and scholarship eligibility.

Grades are determined by instructors, based upon measures determined by the instructor and department and may include: evaluation of responses, written exercises and examinations, performance exercises and examinations, classroom/laboratory contributions, mastery of pertinent skills, etc. The letter grade “A” is an exceptional grade indicating superior achievement; “B” is a grade indicating commendable mastery; “C” indicates satisfactory mastery and is considered an average grade; “D” indicates substandard progress and insufficient evidence of ability to succeed in sequential courses; “E” (failing) indicates inadequate mastery of pertinent skills or repeated absences from class; “UW” indicates unofficial withdrawal from class.

**University Policies**

**Academic Integrity**

Utah Valley University expects all students to maintain integrity and high standards of individual honesty in academic work, to obey the law, and to show respect for others. Students of this class are expected to support an environment of academic integrity, have the right to such an environment, and should avoid all aspects of academic dishonesty. Examples of academic dishonesty include plagiarizing, faking of data, sharing information during an exam, discussing an exam with another student who has not taken the exam, consulting reference material during an exam, submitting a written assignment which was authored by someone other than you, and/or cheating in any form.

In keeping with UVU policy, evidence of academic dishonesty may result in a failing grade in the course and disciplinary review by the college.  Any student caught cheating will receive, at minimum, zero points on that particular assignment for the first offense.  A second offense can result in failing the course and will entail being reported to Student Advising.  Academic dishonesty includes, in part, using materials obtained from another student, published literature, and the Internet without proper acknowledgment of the source.   Additional information on this topic is published in the student handbook and is available on the UVU website.

### **Student Code of Conduct**

All UVU students are expected to conduct themselves in an appropriate manner acceptable at an institution of higher learning. All students are expected to **obey the law**, to **perform contracted obligations**, to **maintain absolute integrity and high standards** of individual honesty in academic work, and to observe a **high standard of conduct for the academic environment**.

The Student Rights and Responsibilities Code, or Code of Conduct, outlines for students what they can expect from the University and what the University expects of them.

Students should review their Rights and Responsibilities. The Code of Conduct also outlines the process for academic appeals, and appeals related to misconduct and sanctions. It can be found at <http://www.uvu.edu/studentconduct/students/>

**Student Responsibilities**

You are expected to take an active role in the learning process by meeting course requirements as specified in written syllabi. Faculty members have the right to establish classroom standards of behavior and attendance requirements. You are expected to meet these requirements and make contact with faculty members when unable to do so.

**Withdrawal Policy**

If you do not wish to take this course or find that you are unable to continue, you should officially withdraw by the deadline stated in the current semester UVU Student Timetable.

You can officially withdraw from a course by dropping it through the online registration system or the campus One Stop desk (BA 106) by the listed date. If you officially withdraw from a course by the "Last Day to Drop and Not Show on Transcript," the course will not appear on your academic transcripts. If you officially withdraw from a course by the "Last Day to Withdraw," a "W" will appear on your transcripts. Although your GPA will not be affected — a "W" will indicate that you chose to withdraw. If you fail to complete the course and do not drop it before the "Last Day to Withdraw," a "UW" or "E" (a failing grade) will appear on your transcripts.

Withdrawing from a course may impact your financial aid status. For more information, see: UVU Financial Aid.

**Cheating and Plagiarism Policy Procedures**

This document was taken from the Utah Valley University Policy 541, The Student Rights and Responsibilities Code

5.4.4 Each student is expected to maintain academic ethics and honesty in all its forms, including, but not limited to, cheating and plagiarism as defined hereafter:

1) Cheating is the act of using or attempting to use or providing others with unauthorized information, materials, or study aids in academic work. Cheating includes, but is not limited to, passing examination answers to or taking examinations for someone else, or preparing or copying another's academic work.

2) Plagiarism is the act of appropriating another person's or group's ideas or work (written, computerized, artistic, etc.) or portions thereof and passing them off as the product of one's own work in any academic exercise or activity.

3) Fabrication is the use of invented information or the falsification of research or other findings. Examples include but are not limited to:

a) Citation of information not taken from the source indicated. This may include the incorrect documentation of secondary source materials.

b) Listing sources in a bibliography not used in the academic exercise.

c) Submission in a paper, thesis, lab report, or other academic exercise of falsified, invented, or fictitious data or evidence, or deliberate and knowing concealment or distortion of the true nature, origin, or function of such data or evidence.

d) Submitting as your own any academic exercise (written work, printing, sculpture, etc.) prepared totally or in part by another.

### **AI Statement**

\*adapted from [Temple University](https://teaching.temple.edu/sites/teaching/files/resource/pdf/Chat-GPT%20syllabus%20statement%20guidance.pdf) statement on AI in classes.

(https://teaching.temple.edu/sites/teaching/files/resource/pdf/Chat-GPT%20syllabus%20statement%20guidance.pdf)

AI programs are not a replacement for your human creativity, originality, and critical thinking. Writing, thinking, and researching are crafts that you must develop over time to develop your own individual voice.  At the same time, you should learn how to use AI and in what instances AI can be helpful to you.

The use of generative AI tools (e.g. ChatGPT, Google Bard, etc.) is permitted in this course for the following activities:

* Brainstorming and refining your ideas;
* Fine tuning your research questions;
* Finding information on your topic;
* Drafting an outline to organize your thoughts; and
* Checking grammar and style.

The use of generative AI tools is not permitted in this course for the following activities:

* Impersonating you in classroom contexts, such as by using the tool to compose discussion board prompts/responses assigned to you or content that you put into a Teams/Canvas chat.
* Completing group work that your group has assigned to you, unless it is mutually agreed upon that you may utilize the tool.
* Writing a draft of a writing assignment.
* Writing entire sentences, paragraphs or papers to complete class assignments.

You are responsible for the information you submit based on an AI query (for instance, that it does not violate intellectual property laws, or contain misinformation or unethical content). Your use of AI tools must be properly documented and cited in order to stay within university policies on academic honesty.

Any student work submitted using AI tools should clearly indicate what work is the student’s work and what part is generated by the AI. In such cases, no more than 25% of the student work should be generated by AI. If any part of this is confusing or uncertain, please reach out to me for a conversation before submitting your work.

### **Students with Disabilities**

**Students who need accommodations because of a disability** may contact the UVU Office of Accessibility Services (OAS), located on the Orem Campus in LC 312. To schedule an appointment or to speak with a counselor, call the OAS office at 801-863-8747. Deaf/Hard of Hearing individuals, email [nicole.hemmingsen@uvu.edu](https://owa.uvu.edu/owa/redir.aspx?C=r3xUa4y2bkalWljgIj1VXM3KzYlusNIIESMqIpkF5USfG-H3cUMstYl8DNScKc_quB49PvOQ-l0.&URL=mailto%3anicole.hemmingsen%40uvu.edu) or text 385-208-2677.

**Religious Accommodations**

At the beginning of each semester, you shall promptly review the course syllabus and class schedule and notify faculty to request an accommodation for sincerely held religious beliefs and practices using the *Religious Accommodation Request Form*.

**Dangerous Behavior**

The faculty member has the right to demand and secure the immediate removal of any person from the classroom whenever the faculty member determines, to the best of his or her knowledge or belief, that the person's actions are threatening or dangerous to students or themselves. If the faculty member cannot resolve a disruptive situation, the faculty member may request that the disruptive person(s) leave the classroom. If the disruptive person(s) will not leave voluntarily, the faculty member may call University Police for assistance. The incident shall be reported to the Dean of Students and to the Director of Judicial Affairs in accordance with Policy 541 *Student Rights and Responsibilities Code*.

**Discriminatory, Exclusionary, or Disruptive Behavior**

Faculty members observing discriminatory, exclusionary, or disruptive behavior follow procedures described in UVU Policy 541 *Student Rights and Responsibilities Code.* 5.6

**Attendance**

Attendance in this class is not mandatory due to the different learning preferences with each student. However, class will be held according to the schedule on the top of this syllabus. Chapters will be covered in class as listed in the semester schedule below. Class will consist of chapter reviews, discussion and group activities.

**Policies/References**

1. Policy 541: Student Rights and Responsibilities Code <https://www.uvu.edu/catalog/current/policies-requirements/student-rights-and-responsibilities.html>
2. Policy 601: Classroom Instruction and Management. <https://policy.uvu.edu/getDisplayFile/5750ed2697e4c89872d95664>
3. Policy 635: Faculty Rights and Professional Responsibilities. <https://policy.uvu.edu/getDisplayFile/563a40bc65db23201153c27d>

**Definitions**

* 1. Syllabus: An agreement between faculty and students that communicates course structure, schedule, student expectations, expected course outcomes, and methods of assessment to students.

### **Dropping the Class**

### \_\_\_\_\_\_\_\_\_ is the last day to drop the course without it showing on your transcript.

\_\_\_\_\_\_\_\_\_ is the last day to withdraw from the class.   
If you drop the high school class, you must also withdraw from the UVU class to avoid receiving a failing grade.

Due dates and this syllabus may change at the instructor’s discretion due to the needs of the class members.