

# Math 3311 Functions and Modelling Course Syllabus, Fall 2020

## University of Houston

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Math 3311 section 14255 is online on Microsoft Team.

Download Team for class room link.

Check courseware [www.casa.uh.edu](http://www.casa.uh.edu) for classroom link and teaching calendar.

There is lot of reading in this course.

You need a computer or laptop with high speed internet.

Check [www.casa.uh.edu](http://www.casa.uh.edu) for all online assignments and materials as Modules :1-3 to do your homework and other assignments. There is No Text book for this class. And NO access code

Prerequisites: [MATH 1432](#) and [CUIN 1101](#). Ideas and activities that reinforce interrelationships among topics in mathematics, especially as taught in secondary education. Recurrent themes will be the use of transformations, data analysis methods, and technology.

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## University of Houston

### Overview

The course emphasizes conceptual understanding and communication of mathematical topics through modeling, problem solving, and technology. An emphasis is on modeling with linear, exponential, and trigonometric functions; curve fitting; discrete and continuous models. Use of appropriate technology is explored.

### Learning Objectives

Upon successful completion of this course, students will understand and be able to apply the ideas of mathematics to a variety of problems. They will be able to translate ordinary language descriptions of problems into mathematical expression, derive solutions by rigorous mathematical methods, interpret their results, and explain them.

The curriculum we will use is produced by the Mathematics of Doing, Understanding, Learning and Educating for Secondary Schools (MODULE(S2)) Project is an outgrowth of the work of the Mathematics Teacher Education Partnership (MTE-Partnership), a national collaborative working towards improving the number and quality of secondary mathematics teachers prepared in institutions of higher education. The MTE-Partnership is founded on a set of Guiding Principles (MTE-Partnership, 2014) which include a focus on transforming preparation programs so that prospective teachers develop and convey views that “mathematics is a living and evolving human endeavor” (p. 4), and develop teaching practices that “demonstrate a dedication to equitable pedagogy” (p. 5).

### Course Homepage/CASA

The course homepage for this class is [www.casa.uh.edu](http://www.casa.uh.edu). It is highly recommended that you check the CASA class page at least once a day. This will allow you to stay up to date with assignments, homework and announcements. This page will provide you with access to the textbook, homework assignments, the syllabus, the course calendar, any online lectures and useful links.

### Honor Principle

University of Houston students are expected to adhere to the Academic Honesty Policy as described in the UH Undergraduate Catalog. “Academic dishonesty” means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at the University of Houston or by a course instructor to fulfill any and all academic requirements. Academic dishonesty includes, but is not limited to, the following: Plagiarism;

Cheating and Unauthorized Group Work; Fabrication, Falsification, and Misrepresentation; Stealing and Abuse of Academic Materials; Complicity in Academic Dishonesty; Academic Misconduct. Refer to UH Academic Honesty website and the UH Student Catalog for the definition of these terms and university’s policy on Academic Dishonesty. Anyone caught cheating will receive sanctions as explained on these documents and will be reported to the department for further disciplinary action. The sanctions for confirmed violations of this policy shall be commensurate with the nature of the offense and with the record of the student regarding any previous infractions. Sanctions may include, but are not limited to: a lowered grade, failure on the examination or assignment in question, failure in the course, probation, suspension, or expulsion from the University of Houston, or a combination of these. Students may not receive a W for courses in which they have been found in violation of the Academic Honesty Policy. If a W is received prior to a finding of policy violation, the student will become liable for the Academic Honesty penalty, including F grades.

# Math 3311 Functions and Modelling Course Syllabus, Fall 2020

## University of Houston

### Grades:

Final course grades are assigned according to student performance, using the guideline below:

**Homework** 20%

**Written Stimulation of practice (SOP)** 30% (each 10 percent)

The student will complete these assignments by writing 1-2-page report that describe how you would plan to facilitate a discussion with your student which will allow you to elicit student thinking about a modelling process while addressing given questions about certain lesson. The three written SOPs go along with the following lessons:

- Water Conservation, Shower v. Bath Task
- Memorization
- Area of Sioux Reservation Land

**Video Stimulation of practice (SOP)** 30% (each 10 percent)

The student will complete these assignments by submitting a short presentation (5-7 minutes) of themselves in class responding to a mock teaching situation. The three video go along with the following lessons

- Critical Reading of Mathematical Models: Muffin Sale Task
- Lost Cell Phone
- Flint water Crisis

**Final Project:** 20%

As a Final project for the model course, each student chooses a situation to model based on their preferences and what they find interesting to end the course Option will be given or student choose their own topic.

### Guidelines:

UH students have all the features of OFFICE 365, such as MS Teams, SharePoint and a lot more.

You create the videos through MS STREAM feature of the Office 365.

Once you create the videos, upload them in your Share point account. Then send the video link to me.

Do not put restriction on the link for me to open.

If I cannot open the video, then you automatically receive a zero grade.

Do not record video with your cell phone and sent it through email

# Math 3311 Functions and Modelling Course Syllabus, Fall 2020

## University of Houston

Sometimes the videos are long and cannot be sent through email.

Check all due dates for online assignments on courseware.

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Letter grades will be assigned as follows:

A	$x > 93$	B-	$80 \leq x < 83$	D+	$67 \leq x < 70$
A-	$90 \leq x < 93$	C+	$77 \leq x < 80$	D	$63 \leq x < 67$
B+	$87 \leq x < 90$	C	$73 \leq x < 77$	D-	$60 \leq x < 63$
B	$83 \leq x < 87$	C-	$70 \leq x < 73$	F	below 60

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### Incompletes

An incomplete (I) may be awarded to you by your teacher if the reason is a compelling NON-ACADEMIC reason, you have completed virtually all the course assignments AND you have a passing grade on this work.

Incompletes are NOT available to students who have done little of the coursework nor for students who have failing grades on what they have done. See your teacher to discuss eligibility and to fill out and sign the Incomplete contract. This is also required and must be signed in advance of an I being posted. Imminent failure is not an acceptable reason to be awarded an incomplete.

### Dropping

If a student wants to drop the class, it is his/her responsibility to do so by logging on [access.uh.edu](http://access.uh.edu) and completing the drop process before the drop deadline. Instructors cannot drop students for any reason.

### Accommodations

The University of Houston System complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students who have a disability. In accordance with Section 504 and ADA guidelines, University of Houston strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please visit The Center for Students with DisABILITIES (CSD) website at <http://www.uh.edu/csd/> for more information.

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Accommodation Forms: Students seeking academic adjustments/auxiliary aids must, in a timely manner (usually at the beginning of the semester), provide their instructor with an approved current Student Accommodation Form (paper copy or online version, as appropriate) before an approved accommodation can be implemented.

Details of this policy, and the corresponding responsibilities of the student are outlined in The

# Math 3311 Functions and Modelling Course Syllabus, Fall 2020

## University of Houston

Student Academic Adjustments/Auxiliary Aids Policy (01.D.09) document under (STEP 4: Student Submission (5.4.1 & 5.4.2), Page 6). For more information please visit the Center for Students with Disabilities FAQs page.

Additionally, if a student is requesting a (CSD approved) testing accommodation, then the student will also complete a Request for Individualized Testing Accommodations (RITA) paper form to arrange for tests to be administered at the CSD office. CSD suggests that the student meet with their instructor during office hours and/or make an appointment to complete the RITA form to ensure confidentiality.

\*Note: RITA forms must be completed at least 48 hours in advance of the original test date. Please consult your counselor ahead of time to ensure that your tests are scheduled in a timely manner. Please keep in mind that if you run over the agreed upon time limit for your exam, you will be penalized in proportion to the amount of extra time taken.

### UH CAPS Statement

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS ([www.uh.edu/caps](http://www.uh.edu/caps)) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus. [http://www.uh.edu/caps/outreach/lets\\_talk.html](http://www.uh.edu/caps/outreach/lets_talk.html)

Please read the following UH policy

- [Interim Undergraduate Grade Policy](#)
- [Grade Exclusion Policy](#)
- [Student Resources](#)
- [Excused Absence Policy](#)
- [Academic Dishonesty](#)

Computer and internet access is required for this course. For the current list of minimum technology requirements and resources, copy/paste/navigate to the URL <http://www.uh.edu/online/tech/requirements>. For additional information, contact the office of Online & Special Programs at [UHOnline@uh.edu](mailto:UHOnline@uh.edu) or 713-743-3327.

The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

**Math 3311 Functions and Modelling Course Syllabus, Fall 2020**  
**University of Houston**

Please check the following link for all UH important information

[UH Syllabus 2020](#)