# MATH.1314 – COLLEGE ALGEBRA COURSE SYLLABUS – FALL 2022

INSTRUCTOR NAME: Dr. Blerina Xhabli INSTRUCTOR EMAIL: <u>bxhabli@central.uh.edu</u> INSTRUCTOR OFFICE/HOURS: MWF 12:30pm – 1:30pm and/or by appointment

COURSE WEBPAGE: <u>https://www.casa.uh.edu</u> COURSE PLATFORM: MS Teams – <u>MATH1314-11573-F22</u> (link on CASA too) COURSE CALENDAR: <u>http://www.math.uh.edu/~blerina/Math1314F22.html</u>

COURSE/SECTION NUMBER: Math.1314/11573 LIVE SESSION TIME(S)/CONSULTATIONS: Thursdays 3:30pm – 5:00pm Online PREREQUISITES: Math.1300 or a satisfactory passing score on a placement examination\*

**TCCNS COURSE CODE:** If you see any reference to "Math 1310" in your textbook, your instructor's notes, website or any other course materials, note that Math 1310 is the previous code for College Algebra. We have been using the code "Math 1314" since Fall 2021.

**COURSE RATIONALE:** This course is designed to prepare and teach the students the functional approach to mathematical relationships that they will need for MATH 2312 Precalculus and MATH 2413 Calculus I. Students with prior credit in MATH 2312 or MATH 2413 will not be allowed to enroll or receive credit in MATH 1314. Check with your degree plan as to what math course your college requires.

**COURSE DESCRIPTION:** In-depth study and applications of polynomial, rational, radical, absolute-value, piece-wise, exponential and logarithmic functions/equations/inequalities, graphing skills and linear systems of equations and solution methods.

**REQUIRED TEXTBOOK:** The learning materials for Math 1314, including the textbook, are available online in electronic form (PDF) through <u>CASA</u> website at <u>www.casa.uh.edu</u>. Students pay for access to their CASA account as part of their fee bill via CTAP. If one opts out of the <u>CTAP</u>, they can purchase an access code for this course at UH Bookstore. In this case, if the code is not entered by the deadline specified on CASA, students will lose access to CASA. No make ups will be given for assignments missed during the no-access period. More information on the Cougar Textbook Access Program (<u>CTAP</u>): <u>https://uh.edu/af-auxiliary-services/ctap/</u> and <u>https://uh.edu/af-auxiliary-services/ctap/ctap-faqs/</u>

# Student Learning Outcomes/Learning Objectives - SLO Common Course Objectives

Functions:

- Use and interpret function notation.
- Find the domain of polynomial, rational, radical, exponential, and logarithmic functions.
- Find a symbolic representation of the sum, difference, product, quotient, and composition of two functions.
- Evaluate the sum, difference, product, quotient, and composition of two functions at a given value of the respective domain for functions represented symbolically, graphically, and numerically.
- Find the inverse of a function represented symbolically, graphically, or numerically.
- Interpret the graphs of functions.

Graphing functions:

- Sketch the graphs of the following functions: Lines,  $x^2$ ,  $a^x$ , and  $\log_a x$
- Identify and sketch transformations of the graphs of the functions:  $x^2$ ,  $x^3$ ,  $\sqrt{x}$ ,  $\frac{1}{x}$ ,  $\frac{1}{x^2}$ , |x|.
- Describe the end behavior of polynomial functions.
- Approximate the zeros of a function from its graph.
- Solve an inequality involving a function from its graph.
- Graph a piece-wise defined function.

Symbolic Adeptness:

- Solve polynomial, rational, exponential, and logarithmic equations symbolically.
- Use the Fundamental Theorem of Algebra
- Find the vertex of a parabola written in standard form by using the formula h = -b/2a.
- Convert an exponential equation to logarithmic form, and a logarithmic equation to exponential form.
- Evaluate exponential and logarithmic functions using the change of base formula and a calculator.
- Use the properties of logarithms to expand a logarithmic expression, and to write an expanded logarithmic expression as a single logarithm.
- Solve a system of linear equations using elimination/substitution methods.

Applications

- Recognize and use applications of linear functions.
- Recognize and use applications of quadratic functions, including falling object problems and extrema problems.
- Recognize and use applications of rational functions.
- Recognize and use applications of exponential and logarithmic functions
- Recognize and use applications of systems of linear equations.

# LEARNING OUTCOMES

Upon successful completion of this course, students will be able to do most of the following:

- 1. Demonstrate understanding and knowledge of properties of functions, which include domain and range, operations, compositions, and inverses.
- 2. Recognize and apply polynomial, rational, exponential, and logarithmic functions and solve related equations.
- 3. Apply graphical, symbolic and numeric techniques.
- 4. Evaluate all roots of higher degree polynomial and rational functions.
- 5. Recognize, solve and apply systems of linear equations.
- 6. Solve absolute value, polynomial and rational equations and inequalities.

The General Education Competency of:

- 1. Critical Thinking: gathering, analyzing, synthesizing, evaluating and applying information is covered in every SLO.
- 2. Quantitative and Empirical Reasoning: applying mathematical, logical, and scientific principles and methods is covered in every SLO.
- 3. Technology Skills: using appropriate technology to retrieve, manage, analyze, and present information is covered in SLOs #1, 2, 3, 4, 5 and 6.
- 4. Written, Oral and Visual Communication: communicating effectively adapting to purpose, structure, audience and medium is covered in every SLO.

# TECHNOLOGY REQUIREMENTS

Computer and internet access is required for this course. In summary, students will need:

- a functioning and updated Computer (with microphone, speaker or earphones, and webcam)
- reliable internet connection
- PDF viewer
- Ability to log in to CASA for online assignments.
- Ability to watch mp4 files.
- Ability to access Microsoft TEAMS platform.
- Note that all UH students have access to MS teams with their cougarnet ID.

# **Resources for Online Learning**

University of Houston is committed to student success, and provides information to optimize the online learning experience through our <u>Power-On</u> webpage. Please visit this webpage for a comprehensive set of resources, tools and tips including: obtaining access to the internet, AccessUH; requesting a laptop through the Laptop Loaner Program; using your smartphone as a webcam; and downloading Microsoft Office 365 at no cost. For questions or assistance contact <u>UHOnline@uh.edu</u>.

#### COURSE DELIVERY FORMAT FOR ASYNCHRONOUS ONLINE COURSES

This course is taught **asynchronously**, which means there is no designated day or time assigned to the course (although optional synchronous sessions are possible, such as virtual office hours or discussion groups). **Asynchronous instruction** generally involves accessing content, such as recorded video lectures, readings, discussion prompts, assignments, and assessments during a flexible time frame, with due dates as specified. This course is not self-paced; students are expected to follow assignment due dates as specified on CASA calendar.

A student enrolled in this class, is **required to watch pre-recorded lecture videos** and to take notes while watching. The blank lecture notes and pre-recorded lecture videos covering the course material will be posted on the CASA calendar and on the class team. Students are responsible for watching these videos in a timely manner and preferably before attending the live problem session.

**Each lecture video has popper questions embedded in them.** After watching the lecture videos, the student is required to **submit the popper questions** under the EMCF tab and to work on the corresponding online quizzes and homework.

Live Review Sessions/Consultations for this course will take place every Thursday, 3:30pm-5:00pm on MS teams. During these live sessions, the instructor will answer your questions, review important topics, or work on additional topics to be covered. Students are expected to behave professionally during the live sessions. Any students who do not follow the university's code of conduct might be removed from the session. Every session will be recorded and the student will be able to access this video through the MS Team and/or CASA. By joining a live session, students give consent to be recorded on the live session video. If you can't attend the live session; make sure you watch the recorded video. Attendance is not mandatory but is recommended.

# COVID-19 INFORMATION

Students are encouraged to visit the University's <u>COVID-19</u> website for important information including on-campus testing, vaccines, diagnosis and symptom protocols, campus cleaning and safety practices, report forms, and positive cases on campus. Please check the website throughout the semester for updates.

# **VACCINATIONS**

Data suggests that vaccination remains the best intervention for reliable protection against COVID-19. Students are asked to familiarize themselves with pertinent <u>vaccine information</u>, consult with their health care provider. The University strongly encourages all students, faculty and staff to be vaccinated.

#### **Reasonable Academic Adjustments/Auxiliary Aids**

The University of Houston 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 disabled students. In accordance with Section 504 and ADA guidelines, UH 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 contact <u>the Justin Dart Jr. Student Accessibility Center</u> (formerly the Justin Dart, Jr. Center for Students with DISABILITIES).

# EXCUSED ABSENCE POLICY

Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in University of Houston <u>Undergraduate Excused Absence Policy</u> and <u>Graduate Excused Absence Policy</u> for reasons including: medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Under these policies, students with excused absences will be provided with an opportunity to make up any quiz, exam or other work that contributes to the course grade or a satisfactory alternative. Please read the full policy for details regarding reasons for excused absences, the approval process, and extended absences. Additional policies address absences related to <u>military service</u>, <u>religious holy</u> days, pregnancy and related conditions, and disability.

# **RECORDING OF CLASS**

Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the <u>Justin Dart, Jr.</u> <u>Student Accessibility Center</u>. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with *anyone* without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

# <mark>Syllabus Changes</mark>

Due to the changing nature of the COVID-19 pandemic and due to unexpected situations, please note that the instructor may need to make modifications to the course syllabus and may do so at any time. Notice of such changes will be announced as quickly as possible through email and during the lectures.

#### **COURSE EVALUATION ASSESSMENTS/GRADING SCHEME**

#### A student in this class is expected to complete the following assignments:

- 1. Course Policy Quiz
- 2. 3 Regular Exams
- 3. Final Exam
- 4. Weekly Online Quizzes (mostly 2 quizzes per week)
- 5. Weekly Homework Assignments
- 6. Participation Poppers (quick multiple-choice problems asked throughout the lectures)

#### **Components and Weights of Semester Assignments:**

- Test 1: 16%
- Test 2: 16%
- Test 3: 16%
- Final Exam: 22%
- Online Quizzes: 15%
- Homework: 10%
- Poppers: 5%
- Total: 100%

# **GRADING SCALE**

If you call your average "x", then the letter grades will be assigned as follows:

<b>A</b> $93 \le x \le 100$	<b>B-</b> $80 \le x \le 83$	<b>D</b> + 67 $\leq$ x < 70
<b>A-</b> $90 \le x < 93$	$C + 77 \le x < 80$	<b>D</b> $63 \le x < 67$
<b>B</b> + 87 $\leq$ x < 90	<b>C</b> $73 \le x < 77$	<b>D-</b> $60 \le x \le 63$
<b>B</b> 83 $\leq$ x < 87	<b>C-</b> $70 \le x < 73$	$\mathbf{F}  0 \le \mathbf{x} < 60$

Note that the Letter Grade Calculator does not round; for example, 79.99 is not rounded to 80.

# Course Policy Quiz

The information contained in this class syllabus is an abbreviated description of the course. You are responsible for knowing all of this information. The course policy quiz will be administered at the beginning of the semester to establish the knowledge of the rules for this course.

The course policy quiz can be found on CASA under "online assignments" tab. Students need to make 100% on this quiz in order to access the other online assignments (quizzes, tests, etc.). Read the syllabus before taking this quiz.

# PARTICIPATION POPPER INSTRUCTIONS

You will learn the content of this course by watching every prerecorded lecture video and attending the weekly live review session (or watching the live session recording). These videos should be watched in a timely manner in order to master the content and continue with new topics. The videos will be interactive and display multiple choice popper questions to maintain your concentration and get you engaged in the lecture. Every popper will have a deadline to be completed. Thus, you should expect two forms of poppers: poppers embedded in pre-recorded lecture videos, or poppers given during live problem sessions:

- 1. **Poppers embedded in Prerecorded Lecture Videos:** Pre-recorded lecture videos have popper questions embedded in them; turn in the popper under EMCF tab at CASA under the corresponding title (for example, Section 4.1 poppers will be turned in under "Popper S41".)
- 2. **Poppers given during Live Review Sessions:** Your instructor might assign poppers during a live session. Video recordings will be posted after the live session ends. If you can't attend the live session, make sure you watch the video ASAP and turn in the popper questions under the EMCF tab at CASA before the deadline if a popper is given during that session.

Popper due dates and times can be seen under EMCF tab at CASA. 15% of all popper questions or 6 missed lecture sessions' poppers will be dropped to cover for emergencies/unexpected events.

Sharing answers to popper questions (online, or at group chats, or at any other source) is considered an academic honesty policy violation. Please read the information regarding Academic Honesty below and do not share answers to poppers with your friends. Not only this is cheating; it also prevents other students from watching videos to learn the material and hence this violation is taken very seriously.

# **Online Quizzes:**

Online quizzes will be given regularly in this course. The quizzes are located in your CASA accounts under the Online Assignments tab. After the completion of the course policy quiz, you will be able to see the list of quizzes for each topic you will be learning. The quizzes will close on the due dates given on CASA at 11:59 pm and will not re-open. If the quiz is still open when the time expires, your work will not be saved; you must submit any online assignment before 11:59pm. **Two lowest quizzes will be dropped.** The primary reason for this policy is to offset the impact of zero/low quiz scores due to emergencies on a student's final course grade. You have 20 times to take each quiz and your highest score is retained as final score. There is a 60 minute time limit for most quizzes. Online quizzes will be given twice weekly in this course.

**Important Note:** We begin this course with **Quiz 00**. **Quiz 00** is over the prerequisite material to be known for a smooth transition to College Algebra. The main objective of this quiz is to see if you have the necessary background and skills needed to be successful in this course.

**Impact of Quiz 00 Completion:** If you score low on your first attempt (below 60); you may consider dropping this course to take Math 1300 to prepare for this course. If that is not the case, we strongly recommend that you enroll in an **SEP WORKSHOP** designed for Math 1314 students; you can add a workshop in your PeopleSoft account before the last day to add classes. If you have questions regarding how to add this course, contact your instructor. The workshop will count as 1-credit course. This workshop will help you to fill the background with basic algebraic and graphing skills to get ready for this course. Furthermore, it will help you with the different topics of College Algebra throughout the semester. See **SEP WORKSHOP SCHEDULE** here: https://uh.edu/nsm/scholar-enrichment/workshops/sep-workshop-schedule.pdf

Completing the quizzes within the given time period is very important for your success. Once the deadline passes, then the quiz is done. Neither the instructor, nor Math Department, is responsible for any difficulty that you have in accessing the quizzes. Please don't delay taking quizzes – there are times during the week when CASA is slow or overloaded. There is **no amnesty period** for the quizzes; the quizzes will NOT be reopened at the end of the semester. Please contact CASA tech support directly if you are having technical problems for your account.

# TEST INFORMATION

There will be 3 tests along with a mandatory final exam:

- Tests 1, 2, 3 and the Final are taken at CASA testing center with reservation. You must make a reservation to take a test prior to the first testing day. You should print out the web page showing your reservation time for your records and proof of your reservation.
- Tests are 60 minutes long and the Final is 110 minutes long. Go to CASA Testing center on time to take the test. Follow the steps properly, do all your test problems and push the "Submit" button when you're completely ready to leave the Testing Center, AFTER you've finished ALL the questions and checked your work.
- The Final Exam is comprehensive and mandatory for ALL students. There is no "exemption" or "opt-out" from the final. Reserve a seat for it when reservation begins. Reservations are made online at CASA on a first come first serve basis. Make your travel plans so that you are available during the testing period.
- If you miss a test without a valid excuse as described below, you receive a zero for it. When you take the final, the grade on the final will replace that zero. If you miss more than one test, only the first one will be replaced. If the final exam grade is better than any of the previous

test grades, then the final exam grade will automatically replace the lowest test grade even if you do not miss any test. The primary reason for this policy is to offset the impact of zero scores due to emergencies (medical, personal, or otherwise) on a student's final course grade.

• You can NOT use calculators during any of the exams; study accordingly.

# TEST CONTENT AND TEST SCHEDULE

Test 1: Chapter 2 and Chapter 6\*: September 26 – September 29 Test 2: Chapter 3: October 17 – October 20 Test 3: Chapter 4 and Sections 5.1/5.2/5.3: November 14 – November 16 Final: Comprehensive: December 09 – December 14

# <mark>Extra Credit</mark>

There are practice tests and a practice final on Courseware. You can take the practice tests several times (up to 20 times) and we only take your best score. You will have two weeks to work on each practice test before the test period begins. If you take the practice test prior the first day of the testing period, then **5% of the highest score** you earn will be applied to the relevant test as extra credit. You can continue to work on the practice tests until the last day of the testing period. Pay attention to the "end" dates on these.

In general, **practice tests end before the exam period starts**. To receive extra credit, students should take the practice tests before they close.

# **Homework**

Homework is going to be assigned weekly covering all the material seen during the prior week of lectures. The homework assignments will be posted in your CASA accounts under the EMCF tab, and you need to submit your homework via your CASA account by the given deadline. Please see the link for Homework on your instructor's website for due dates and more detailed information. **NO late homework** is accepted. We will drop 2 lowest grades at the end of the semester.

# **PROCTORED EXAMS (ONLINE DISTANCE EDUCATION)**

Exams for this course require proctoring. If a student lives more than 100 miles away from UH campus, and would like to use proctoring services in their area, the student must contact the instructor to get approval for using <u>UH Proctoring Services</u>. Student needs to send an email to the instructor specifying the request (and should include proof of residence) at least 2 weeks before the first day of a testing period. Once the instructor approves it, the student needs to contact UH proctoring services. Information regarding proctoring services for the University can be found on

the <u>Online and Special Programs</u> webpage. Prior to requesting proctoring services, students should read and understand the outlined proctoring procedures. Students who received instructor approval can request proctoring services by completing the Proctoring Request Form on the website. Questions or concerns about proctoring services can be directed to the OSP office at 713-743-3327 or <u>proctoring@uh.edu</u>. Hours of operation are Monday-Friday, 8:00am-5:00pm.

# LATE ASSIGNMENT AND MAKE-UP POLICY

This course is a cumulative course. You as a student need to keep up with the reading, quizzes, homework assignments and exams. Students are expected to check the calendar on CASA several times a week and plan ahead so that they don't miss assignments. We drop some assignments primarily to offset the impact of zero/low scores due to emergencies on a student's final course grade. Hence, students should not expect to have an option to make up missed assignments unless in the case of an excused absence (See: **Excused Absence Policy** above).

If you miss a test, it may be possible to reschedule a test appointment during the testing period (depending on space availability) by using the online scheduler. Rescheduling must be made online in your account; your instructor is not responsible for finding seats or making reservations for you. Your final exam score will replace your lowest midterm exam score if the former is higher. (This replacement, if applicable, will occur at the end of the semester after the Letter Grade Calculator (LGC) is turned off. A missed test will result in a score of zero. If you miss two or more exams, only one of those scores will be replaced.) The primary reason for this policy is to offset the impact of zero/low test scores due to emergencies on a student's final course grade.

If requesting make up work (assignment or test) due to an excused absence: the student needs to contact the instructor in writing before the next class meeting (or as soon as possible afterwards with an explanation regarding why the notice could not be sent before the next class meeting). Read the <u>Undergraduate Excused Absence Policy</u> to see a list of documentations to support your request; follow the guidelines provided on this document to make your request. Your instructor will inform you of the decision in writing (via email).

**Note:** If students lose access to CASA temporarily due to not entering access code by the deadline, or being temporarily dropped from the course for non-payment, then they are responsible for any assignment deadlines that are missed.

# OFFICE HOURS AND OTHER TUTORING OPTIONS

In order to be successful in this course, students should study regularly, plan ahead to work on the assignments, get help when needed. A consistent effort is essential to getting a good grade. My office hours will be held on campus in room PGH 212 every MWF 12:30pm - 1:30pm and by appointment. To request an online appointment, the students must email (see below for proper

emailing etiquette) from their cougarnet email account with their full name, course name and section number and student ID, a brief description of what the nature of the meeting is for and a subject line with "private meeting request MATH 1314. Please give at least 2 or 3 dates / time ranges you are available and I will reply with an online TEAMS link for our meeting. You must RSVP the meeting to reserve the time slot.

Besides attending the instructor's office hours, there are a lot of other qualitative tutoring options that University of Houston offer for free to the enrolled students. You can get help by visiting the following tutoring centers:

- <u>CASA Tutoring Center</u>
- LAUNCH Tutoring Center
- <u>SEP Tutoring Center</u>

# **COMMUNICATION VIA UH EMAIL**

Please check and use your Cougarnet email for communications related to this course. To access this email, <u>login</u> to your Microsoft 365 account with your Cougarnet credentials.

Your instructor will be sending class emails using PeopleSoft; you are responsible for checking your UH email. Per UH Policy, notices properly addressed and so sent via PeopleSoft shall be presumed to have been received by the student. Thus, you are responsible for the content in emails sent to your UH account, regardless if your external (non-UH) email provider filters or blocks them. When emailing your instructor, it is recommended that you use a professional email address and include the course name on the subject line so that your instructor can address your questions accordingly. Please read this link for more on communication via email: <u>EMAIL ETIQUETTE</u>

# ACADEMIC HONOR PRINCIPLE

High ethical standards are critical to the integrity of any institution, and bear directly on the ultimate value of conferred degrees. All UH community members are expected to contribute to an atmosphere of the highest possible ethical standards. Maintaining such an atmosphere requires that any instances of academic dishonesty be recognized and addressed. The <u>UH Academic Honesty</u> <u>Policy</u> is designed to handle those instances with fairness to all parties involved: the students, the instructors, and the University itself. All students and faculty of the University of Houston are responsible for being familiar with this policy.

# TITLE IX/SEXUAL MISCONDUCT

Per the UHS Sexual Misconduct Policy, your instructor is a "responsible employee" for reporting purposes under Title IX regulations and state law and must report incidents of sexual misconduct

(sexual harassment, non-consensual sexual contact, sexual assault, sexual exploitation, sexual intimidation, intimate partner violence, or stalking) about which they become aware to the Title IX office. Please know there are places on campus where you can make a report in confidence. You can find more information about resources on the Title IX website at <a href="https://uh.edu/equal-opportunity/title-ix-sexual-misconduct/resources/">https://uh.edu/equal-opportunity/title-ix-sexual-misconduct/resources/</a>

### SECURITY ESCORTS AND COUGAR RIDE

UHPD continually works with the University community to make the campus a safe place to learn, work, and live. Our Security escort service is designed for the community members who have safety concerns and would like to have a Security Officer walk with them, for their safety, as they make their way across campus. Based on availability either a UHPD Security Officer or Police Officer will escort students, faculty, and staff to locations beginning and ending on campus. If you feel that you need a Security Officer to walk with you for your safety please call 713-743-3333. Arrangements may be made for special needs.

Parking and Transportation Services also offers a late-night, on-demand shuttle service called Cougar Ride that provides rides to and from all on-campus shuttle stops, as well as the MD Anderson Library, Cougar Village/Moody Towers and the UH Technology Bridge. Rides can be requested through the UH Go app. Days and hours of operation can be found at <u>https://uh.edu/af-university-services/parking/cougar-ride/</u>

# <mark>Uh Caps Statement</mark>

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 (<u>http://www.uh.edu/caps</u>) by calling <u>713-743-5454</u> during and after business hours for routine appointments 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. <u>http://www.uh.edu/caps/outreach/lets\_talk.html</u>

# HELPFUL INFORMATION

COVID-19 UPDATES: <u>https://uh.edu/covid-19/</u> COOGS CARE: <u>https://www.uh.edu/dsaes/coogscare/</u> HEALTH FAQS: <u>https://uh.edu/covid-19/faq/health-wellness-prevention-faqs/</u> STUDENT HEALTH CENTER: <u>https://uh.edu/class/english/lcc/current-students/student-healthcenter/index.php</u>

# COLLEGE ALGEBRA TOPIC LIST

# Chapter 1 – An Introduction to Graphs and Lines

- o Points, Regions, Distance and Midpoints
- Lines and Their Graphs
- Graphing Equations

# **Chapter 2 – Solving Equations and Inequalities**

- Linear Equations and Modelling with Linear Equations
- Quadratic/Other Equations
- Complex Numbers
- Linear Inequalities
- o Absolute Value

# **Chapter 3 – An Introduction to Functions**

- o Basic Ideas
- Functions and Graphs
- Transforming Functions
- Maximum and Minimum Values
- Combining Functions
- Inverse Functions

# **Chapter 4 – Polynomial and Rational Functions**

- Polynomial Functions
- Dividing Polynomials
- Roots of Polynomials
- Rational Functions

# **Chapter 5 – Exponentials and Logarithms**

- Exponential Functions
- The Number e
- Logarithms/Properties of Logarithms
- Exponential and Logarithmic Equations

# Chapter 6 – Solving System of Linear/Nonlinear Equations

- Substitution Method
- Elimination Method

		Math 13	314 - Colleg	je Algebra	- Fall '22		
		Fall 20	22 Tentative	e* Course Ca	alendar:		
	*The instru Daily lecture n	uctor reserves the right otes with completed a	nt to make modification after-class notes and	ons to this calendar du important deadlines v	uring the semester, as r vill be posted in your C/	necessary. ASA accounts.	
Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 1 Introduction and	AUGUST 22 First Day of Classes	23 Take the Course Policy Quiz ASAP!	24	25	26	27	28
Prerequisite Chapter 1 Section 2.1/2.2	Course Policy Quiz, and all Quizzes open	Work on Preliminary Homework 00 and Quiz 00					
Week 2 Section 2.3 Chapter 6*	29 Last day to add <mark>a class</mark>	30	31 Quiz 00 DUE (Prerequisite)	SEPTEMBER 1	2 HWK 00 DUE (Preliminary/Ch1)	3 Quiz 01 DUE (Section 2.1/2.2)	4
Week 3 Section 2.4 Section 2.5	5 Labor Day No Class	6	7 Last day to drop without a grade Quiz 02 DUE (Section 2.3)	8	9 HWK 01 DUE (2.1/2.2/2.3)	10 Quiz 03 DUE (Chapter 6*)	11
Week 4 Section 2.6 Section 2.7	12 Practice Test 1 begins	13	14 Quiz 04 DUE (Section 2.4)	15	16 HWK 02 DUE (Ch6*/2.4/2.5)	17 Quiz 05 DUE (Section 2.5)	18
Week 5 Section 2.8 Review Test 2	19	20	21 Quiz 06 DUE (Section 2.6/2.7)	22	23 HWK 03 DUE (2.6/2.7/2.8)	24 Quiz 07 DUE (Section 2.8)	25 Practice Test 1 DUE
Week 6 Section 3.1/3.2 Section 3.4	26 Test 1 begins @CASA Test 1 covers Chapter 2 and Chapter 6*	27	28	29 Test 1 DUE	30 HWK 04 DUE (3.1/3.2)	OCTOBER 1 Quiz 08 DUE (Section 3.1/3.2)	2
Week 7 Section 3.5 Section 3.6	3 Practice Test 2 begins	4	5 Quiz 09 DUE (Section 3.4)	6	7 HWK 05 DUE (3.4/3.5)	8 Quiz 10 DUE (Section 3.5)	9
Week 8 Section 3.7 Review Test 3	10	11	12 Quiz 11 DUE (Section 3.6)	13	14 HWK 06 DUE (3.6/3.7)	15 Quiz 12 DUE (Section 3.7)	16 Practice Test 2 DUE
Week 9 Section 4.1 Section 4.2	17 Test 2 begins @CASA Test 2 covers Chapter 3.	18	19	20 Test 2 DUE	21	22	23
Week 10 Section 4.3 Section 4.4	24	25	26 Quiz 13 DUE (Section 4.1)	27	28 HWK 07 DUE (4.1/4.2)	29 Quiz 14 DUE (Section 4.2)	30
Week 11 Section 4.4 Section 5.1/5.2	31 Practice Test 3 begins	NOVEMBER 1	2 Quiz 15 DUE (Section 4.3)	3	4 HWK 08 DUE (4.3/4.4)	5 Quiz 16 DUE (Section 4.4)	6
Week 12 Section 5.3 Review Test 4	7	8	9 Quiz 17 DUE (Section 5.1/5.2)	10	11 HWK 09 DUE (5.1/5.2/5.3)	12 Quiz 18 DUE (Section 5.3)	13 Practice Test 3 DUE
Week 13 Section 5.4 Section 5.5	14 Test 3 begins @CASA Test 3 covers Chapter 4 and Sections 5.1 - 5.3.	15	16 Test 3 DUE Last day to drop with W grade	17	18	19 Quiz 19 DUE (Section 5.4)	20
Week 14 Section 5.5	21 Practice Final begins	22	23 НАРРҮ	24 THANKS	25 GIVING	26 HOLIDAY!	27
Week 15 Final Review	28	29	30 Quiz 20 DUE (Section 5.5: Exponential Equations)	DECEMBER 1	2 Last Day of Classes HWK 10 DUE (5.4/5.5)	3 Quiz 21 DUE (Section 5.5: Logarithmic Equations)	4
Final Exams	5	6	7	8 Practice Final DUE	9 Final begins @CASA Final Exam is cumulative.	10	11
Final Exams	12	13	14 Final DUE	15	16	17	18