MATH.1314: COLLEGE ALGEBRA COURSE SYLLABUS: SPRING '22 SESSION 6: APRIL 1 – MAY 6

INSTRUCTOR NAME: Dr. Blerina Xhabli INSTRUCTOR EMAIL: <u>bxhabli@central.uh.edu</u> INSTRUCTOR OFFICE/HOURS: Tuesdays 4:00pm-5:30pm Online and/or by appointment

COURSE WEBPAGE: <u>https://www.casa.uh.edu</u> COURSE PLATFORM: MS Teams – <u>MATH1314-17328-SP22S6</u> (link on CASA too) COURSE CALENDAR: http://www.math.uh.edu/~blerina/Math1314SP22S6.html

COURSE/SECTION NUMBER: Math.1314/17328 LIVE SESSION TIME(S)/CONSULTATIONS: Tuesdays 4:00pm – 5:30pm 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 will be using the code "Math 1314" starting 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, absolutevalue, 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 are required to purchase an access code at the Book Store to access the learning materials.** All students have free access to CASA until the access code deadline posted on the course website. To have continuing access to all course materials at CASA, you need to enter the access code.

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. For the current list of minimum technology requirements and resources, visit <u>http://www.uh.edu/online/tech/requirements</u>. For more information, contact the Online & Special Programs Office at <u>UHOnline@uh.edu</u> or 713-743-3327. 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 Tuesday, 4:00pm-5:30pm. During these live sessions, the instructor will answer your questions, review important topics, or work on additional topics to be covered. Every session will be recorded and the student will be able to access this video through the MS Team and/or CASA. If you can't attend the live session; make sure you watch the recorded video. Attendance is not mandatory but is recommended.

- Live Discussion Sessions will take place on MS TEAMS; more information about this team can be found on your CASA calendar. Make sure you are a member of this team.
- 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.
- Turn off your webcam and microphone before joining the live session.
- By joining a live session, students give consent to be recorded on the live session video.

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 the Justin Dart Jr. Student Accessibility Center (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 days</u>, <u>pregnancy and related conditions</u>, and <u>disability</u>.

Religious Holy Days: Students whose religious beliefs prohibit class attendance or completion of specific assignments on designated dates may obtain an excused absence. To do so, please make a written request for an excused absence and submit it to your instructor as soon as possible, to allow the instructor to make arrangements. For more information, see the Student Handbook. http://catalog.uh.edu/index.php

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.

Syllabus Changes

Due to the changing nature of the COVID-19 pandemic, 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 communication and the changes wil be posted accordingly in your CASA accounts and MS Teams.

COURSE EVALUATION/GRADING SCHEME

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

- 1. 4 Regular Exams
- 2. Final Exam
- 3. Weekly Online Quizzes (mostly 5-6 quizzes per week)
- 4. Participation Poppers (small quizzes embedded in prerecorded lecture videos)

Components and Weights of Semester Assignments:

- Test 1: 5%
- Test 2: 16%
- Test 3: 16%
- Test 4: 16%
- Final Exam: 26%
- Online Quizzes: 16%
- Poppers: 5%
- Total: 100%

Note: The grade on the final exam (without extra credit) can be used to replace your lowest test score if it is better than your lowest test grade.

Grading Scale

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

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

POPPER INSTRUCTIONS

You will learn the content of this course by watching every prerecorded lecture video and attending the live 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 Problem 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. 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 quizzes due to take each quizzes are solved. There is a 60 minute time limit for most quizzes. Online quizzes will be given twice weekly in this course.

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 4 tests along with a mandatory final exam:

• Test 1 is over pre-requisite material, which includes Chapter 1 and beginning of Chapter 2. Test 1 will be available online during the first week of school. You will have ONLY one attempt to complete the test. It is recommended to work on Quiz 1, Quiz 2 and complete Practice Test 1 first to see what to expect on Test 1. Study well. **Test 1 is considered a diagnostic test:** It is important to know that if you score low on Test 1 (below 60 without extra credit); you may consider dropping this course and taking the prerequisite course to prepare yourself for this course.

- Tests 2, 3, 4 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.
- Mark your calendar for the following test schedules:

TEST CONTENT AND TEST SCHEDULE

Test 1: Chapter 1 and Section 2.1/2.2: April 7 Test 2: Chapter 2 and Chapter 6*: April 14 Test 3: Chapter 3: October 29 – April 21 Test 4: Chapter 4 and Sections 5.1/5.2/5.3: April 28 Final: Comprehensive: May 5

*The instructor reserves the right to make modifications to this calendar during the semester, if necessary. Lecture blank notes, filled-in notes and video recordings of each section along with important deadlines will be posted in CASA.								
Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Week 1	April 4	5	6	7	8	9	10	
Chapter 1 Chapter 2	Chapter 1 Section 2.1/2.2	Live Discussion I Section 2.3	Chapter 6 Section 2.4	Section 2.5 Section 2.6	Section 2.7 Section 2.8	Poppers DUE		
Chapter 6	All Quizzes and Practice Tests are open to work on.		Quiz 1 - Chapter 1 DUE Quiz 2 - S2.1/2.2 DUE	Test 1 - Online PracticeTest 1 DUE Test 1 covers prerequisite material from Chapter 1 and Sections 2.1/2.2.	Quiz 3 - S2.3 DUE Quiz 4 - Chapter 6 DUE Quiz 5 - S2.4 DUE			
Week 2	11	12	13	14	15	16	17	
Chapter 3	Review II Section 3.1	Live Discussion II Section 3.2	Section 3.4 Section 3.5	Test 2 @CASA PracticeTest 2 DUF	Section 3.6 Section 3.7	Poppers DUE		
	Quiz 6 - S2.5 DUE Quiz 7 - S2.6 DUE		Quiz 8 - S2.7 DUE Quiz 9 - S2.8 DUE	Test 2 covers Chapter 6* and Sections 2.3-2.8.	Quiz 10 - \$3.1 DUE Quiz 11 - \$3.2 DUE			
Week 3	18	19	20	21	22	23	24	
Chapter 4 Review Chapter 5 Quiz 12 - S3 Quiz 13 - S3	Review III Section 4.1	Live Discussion III Section 4.2	Section 4.3 Section 4.4	Test 3 @CASA PracticeTest 3 DUE	Section 5.1/5.2 Section 5.3	Poppers DUE		
	Quiz 12 - S3.4 DUE Quiz 13 - S3.5 DUE		Quiz 14 - S3.6 DUE Quiz 15 - S3.7 DUE	Test 3 covers Chapter 3	Quiz 16 - S4.1 DUE Quiz 17 - S4.2 DUE			
Week 4	25	26	27	28	29	30	May 1	
Chapter 5 ending	Review IV	Live Discussion IV	Section 5.4 Section 5.5	Test 4 @CASA PracticeTest 4 DUE	Work on past Review Videos	Poppers DUE		
	Quiz 18 - S4.3 DUE Quiz 19 - S4.4 DUE		Quiz 20 - S51/52 DUE Quiz 21 - S52/53 DUE	Test 4 covers Chapter 4 and Sec. 5.1/5.2/5.3.	Quiz 22 - \$5.4 DUE			
Week 5	2	3	4	5	6	7	8	
inal Exam	Work on past Review Videos Quiz 23 - S5.5 DUE Quiz 24 - S5.5 DUE	Live Discussion V		Final @CASA PracticeFinal DUE Final Exam is cumulative.	WELL			

<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. 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. Practice tests end on the exam day.

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.

Communication Via Email

Email communications related to this course will be sent to your <u>Exchange Email Account</u> which each University of Houston student receives. The Exchange mail server can be accessed via Outlook, which provides a single location for organizing and managing day-to-day information, from email and calendars to contacts and task lists. Exchange email accounts can be accessed by logging into Office 365 with your Cougarnet credentials or through Acccess UH. They can also be configured on <u>IOS</u> and <u>Android</u> mobile devices. Additional assistance can be found at the <u>Get Help</u> page.

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

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 <u>UH Academic Honesty website</u> 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 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.

Posting answers for Poppers or Homework questions online (at group chats or other online tools) is considered an academic honesty violation. Students are expected to know the difference between "getting/giving HELP on a problem" and "getting/giving answers to a problem". If a student is caught sharing answers (in person or online), he/she might be reported to the departmental hearing officer for an academic honesty violation. If a student becomes aware of cheating or any other violations; that student is responsible for informing the instructor.

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 (<u>www.uh.edu/caps</u>) by calling 713-743-5454 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: https://uh.edu/covid-19/ COOGS CARE: https://www.uh.edu/dsaes/coogscare/ LAPTOP CHECKOUT REQUESTS: https://www.uh.edu/infotech/about/planning/offcampus/index.php#do-you-need-a-laptop HEALTH FAQS: https://uh.edu/covid-19/faq/health-wellness-prevention-faqs/ STUDENT HEALTH CENTER: https://uh.edu/class/english/lcc/current-students/student-healthcenter/index.php

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

Chapter 3 – An Introduction to Functions

- o Basic Ideas
- Functions and Graphs
- Transforming Functions
- o 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
- o Exponential and Logarithmic Equations

Chapter 6 – Solving System of Linear/Nonlinear Equations

- Substitution Method
- Elimination Method