MATH 3325 – Transition to Advanced Mathematics – Section 15431 Summer 2020 (Session 2: June 1 - July 1)

Course Information

| Instructor: | Nicholas Leger nmleger@uh.edu PGH 651B | | | |
|--------------------|---|--|--|--|
| Time and Location: | MTWRF 10:00am–12:00pm, MS Teams (Online) | | | |
| Office Hours: | TBA | | | |
| Course Website: | Blackboard | | | |
| Textbook: | A Transition to Advanced Mathematics, 7th Edition,D. Smith, M. Eggen, R. St. Andre; Cengage Learning, 2011.ISBN: 978-0495562023 P | | | |
| Prerequisites: | MATH 1432 | | | |

Course Description

This course provides an introduction to mathematical proofs and other fundamental topics in mathematics. The goal of the course is to help students make the transition from mathematics courses in which the focus is on computation (Calculus, Differential Equations, Basic Linear Algebra, etc.) to more advanced courses in mathematics in the which the focus is on theory and proofs (Real Analysis, Abstract Algebra, Advanced Linear Algebra, etc.) Key topics include:

- Logic and Proofs
- Set Theory
- Relations and Partitions
- Functions
- Cardinality
- Concepts of Analysis

Class Meetings and Attendance

Classes will be conducted online using Microsoft Teams. All students will be added as a member of the "MATH 3325 (Summer 2020)" team where you'll be able to join live class meetings, attend office hours, and view recordings of previous meetings. Links to recordings of each lecture will also be posted on Blackboard after class has concluded.

While attendance in live meetings does not factor directly into your final grade, it is expected that you attend all live sessions. Generally, class notes will be posted on Blackboard after each lesson, but these notes may not always include all comments or announcements made in lecture. If you miss class, please view the recording of the lecture to make sure that you don't miss important infomation.

Grading Policy

Final grades are based on homework and exam scores weighted as follows:

- Homework: 20%
- Midterm Exam: 30%
- Final Exam: 50%

For letter grades, the following scale applies.

| Α | $x \ge 93$ | $\mathbf{B}-$ | $80 \le x < 83$ | $\mathbf{D}+$ | $67 \le x < 70$ |
|---------------|-----------------|---------------|-----------------|---------------|-----------------|
| $\mathbf{A}-$ | $90 \le x < 93$ | $\mathbf{C}+$ | $77 \le x < 80$ | D | $63 \le x < 67$ |
| $\mathbf{B}+$ | $87 \le x < 90$ | С | $73 \le x < 77$ | D- | $60 \le x < 63$ |
| В | $83 \le x < 87$ | $\mathbf{C}-$ | $70 \le x < 73$ | F | x < 60 |

Homework

Homework will be assigned 2 to 3 times per week. Your completed work should be saved as a single PDF file (both annotated and scanned PDF files are acceptable) and uploaded to Blackboard on the indicated due date. Submissions that are not in PDF format (such as JPG, BMP, or PNG image files) will not be graded. Mobile apps such as CamScanner can help you scan your handwritten work and save it as a PDF file.

Late homework will not be accepted; however, the lowest homework score will be dropped when computing your final homework average. Homework solutions should be prepared independently and **not copied from other sources**. You are encouraged, however, to discuss with others and consult other resources to improve your understanding.

Exams

There will be one midterm exam and a final exam. Exams will be administered online. Details on the testing procedure will be provided during the week preceding each test date. To review the minimum technology requirements for this course, please refer to the following link: http://www.uh.edu/online/tech/requirements

The dates and times of the exams are as follows:

- Midterm Exam: Thursday, June 18th, 10am-12pm
- Final Exam: Wednesday, July 1st, 11am-2pm

Make-up Policy

There will be no make-up test offered for a missed midterm exam.^{*} Instead, you may choose to take a 10% reduction of your final exam score in order to have the option to exclude your midterm exam score from your final grade calculation. Students are expected to take the final exam on the date listed above. A make-up alternative format final exam may be offered in the case of a documented emergency.

*Exceptions may be made for students with approved CSD accommodations (see below).

Additional Information

Academic Honesty Policy: 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 (http://www.uh.edu/provost/policies/honesty/) 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 and Dean of Students Office for further disciplinary action. 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.

Learning 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.

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.

Counseling and Psychological Services (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) 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.