# **Syllabus**

# **Course Information**

Course Number: MATH 302

Course Title: Discrete Mathematics

Section: 501

Time: 1:30pm-2:45pm Tue, Thu

Location: HECC 207

Credit Hours: 3

Course website: https://www.math.tamu.edu/~chliu/teaching/fall20math302.html

#### **Instructor Details**

Instructor: Chun-Hung Liu
Office: Blocker 631B

E-Mail: chliu@math.tamu.edu

Office Hours: Monday 11am-12pm, Friday 11am-12pm, or by appointments (all via Zoom)

# **Course Description**

This class is about discrete math. Topics include formal structures for describing data, algorithms and computing devices, theory and applications of sets, graphs and algebraic structures. We will cover most of sections in Chapters 1, 2, 3, 5, 6, 8, 9 in the textbook. Tentative schedule is included in another document.

## **Course Prerequisites**

MATH 148, MATH 152 or MATH 172.

# **Course Learning Outcomes**

The objective of this course is making students excel in basic notions and techniques in discrete math. Upon successful completion of this course, students will have the abilities to explore advanced or related topics in discrete mathematics.

#### Textbook and/or Resource Materials

"Discrete Mathematics and Its Applications", 8th edition, by Kenneth H. Rosen. McGraw Hill, ISBN 978-1-259-67651-2.

## **Grading Policy**

Homework assignments (10%).

- There will be one homework assignment almost every week. Practicing is the best way to absorb the materials covered in lectures. Collaboration and discussion for homework assignments are allowed, but you must write down the solutions on your own and submit your own copy.
- No late assignment will be accepted except for university approved excuses. Deadline and detailed instructions will be included in the problem sheet of each assignment.
- Only the best 10 grades among the assignments will be counted toward the final semester grade.

- Each assignment contains two types of questions: "required submission questions" and "suggested practice". For each assignment, one of "required submission questions" will be chosen, and only this problem will be graded. The grade of this chosen problem is the grade of this assignment. We will announce which problem is chosen after the grading is complete.
- The solutions of all "required submission questions" will be posted at the course website at eCampus.
- All homework will be submitted to Gradescope. No paper submission or email submission will be accepted unless you obtain an extra permission.

#### Quizzes (10%).

- There will be 11 guizzes.
- Quizzes will be taken at Gradescope. For each quiz, there is a time window (e.g. 48 hours) that
  you can login Gradescope to start your work on the quiz. And once you start, you have to
  complete and upload your work within a time limit (e.g. 15 minutes). Once the time limit has
  been passed, you will not be able to upload or update your solution, even if it is still in the time
  window. The precise time window and time limit for each quiz will be announced later.
- No collaboration or discussion are allowed for quizzes. As long as you have seen the quiz questions, you are not allowed to reveal the questions or discuss with anyone enrolled in this course until the time window is passed, even if you have submitted your work.
- The quiz with the lowest grade will not be counted toward the final semester grade, so only the best 10 grades among these 11 quizzes will be counted.
- If you miss a quiz, it will be counted as 0 point.
- Since you have freedom to work on each quiz in a sufficiently long time window, make-up
  quizzes will unlikely be granted. No make-up quiz will be granted unless you have university
  approved excuses that cover the entire time window and you have missed a quiz due to
  university approved excuses prior to this quiz.
- All quizzes will be submitted to Gradescope. No paper submission or email submission will be allowed unless you obtain an extra permission.

#### 2 midterm exams (40%: 20% for each midterm exam).

- Exam time: Lecture time (1:30pm-2:45pm) on September 29 Tuesday, and November 5
  Thursday.
- No collaboration or discussion are allowed for exams.
- All exams will be submitted to Gradescope. No paper submission or email submission will be allowed unless you obtain an extra permission.
- No late submission will be accepted except for university approved excuses.
- Midterm exams will be taken and proctored online. That is, you can work on your exam at any
  place that you choose. And you have to have a second devise that allows the proctors to see
  your workspace during the exam period. More details will be given when dates approach.

#### Final exam (40%)

- Exam time: **December 4 Friday, 8:00am-10:30am** (official final exam schedule).
- No collaboration or discussion are allowed for exams.
- The final exam will be submitted to Gradescope. No paper submission or email submission will be allowed unless you obtain an extra permission.
- No late submission will be accepted except for university approved excuses.
- The final exam will be taken and proctored online. That is, you can work on your exam at any
  place that you choose. And you have to have a second devise that allows the proctors to see
  your workspace during the exam period. More details will be given when the date approaches.

For the final semester grade, students who get 90%-100% of points will be an A, 80%-90% of points will be a B, 70%-80% of points will be a C, 60%-70% of points will be a D, and an F for otherwise.

Grades record will be frequently updated at the course website at eCampus. You are required to

frequently check the correctness of the grades record posted there. Requests for record correction or regrading for any question in quizzes or assignments should be made by the end of the lecture after the grading is completed. The deadline for requesting regrading midterm or final exams will be announced when the grading is complete.

### Attendance

- Attending lectures is expected, either joining the lecture online or joining via physical classroom attendance.
- In order to keep social distance, physical classroom attendance is reserved for students who do not claim "Remote" on Howdy. If you claim "Remote" but want to go the classroom, you must obtain a permission from the instructor before appearing in the classroom.
- Everyone in the classroom must wear masks properly. Anyone who refuses to properly wear a
  mask will be asked to leave the classroom and be reported to Student Conducts office for
  sanctions.
- Everyone who has symptoms of COVID-19 is not allowed to go the classroom. See the "Campus Safety Measures" and "Personal Illness and Quarantine" sections in this document.
- Each lecture will be streamed via Zoom during the lecture time. It is very likely that each lecture will be recorded and will be able to be accessed later. You are not allowed to share the lecture videos to anyone who is not enrolled in this course.

# Late Work Policy

- No late submission of assignments, quizzes, midterm exams or final exam will be accepted except for university approved excuses.
- Make-ups for missed exams or quizzes will be given only if the absence is due to university approved excuses. To request a make-up quiz, you have to meet the requirement mentioned in the "Grading policy" section stated above.
- Based on university rules, all absence notifications should be sent to the instructor in writing no later than the end of the next working day after the absence (and prior to the absence if possible).
- The make-up should be done within one week after you return school.
- Details about university approved excuses can be found in student rule 7 (https://student-rules.tamu.edu/rule07/).

#### Course Schedule

Dates for midterm exams and the final exam are listed in the "**Grading Policy**" section. Tentative weekly schedule for topics and deadlines for submitting assignments and quizzes will be included in other documents.

# University Policies Attendance Policy

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

Please refer to <u>Student Rule 7</u> in its entirety for information about excused absences, including definitions, and related documentation and timelines.

## Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor.

Please refer to <u>Student Rule 7</u> in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" (Student Rule 7, Section 7.4.1).

"The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" (Student Rule 7, Section 7.4.2).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See <u>Student Rule 24</u>.)

# Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" (Section 20.1.2.3, Student Rule 20).

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at aggiehonor.tamu.edu.

## Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources in the Student Services Building or at (979) 845-1637 or visit disability.tamu.edu. Disabilities may include, but are not limited to attentional, learning, mental

health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

# Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see <u>University Rule 08.01.01.M1</u>):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, you will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with Counseling and Psychological Services (CAPS).

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's Title IX webpage.

#### Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in proper selfcare by utilizing the resources and services available from Counseling & Psychological Services (CAPS). Students who need someone to talk to can call the TAMU Helpline (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at suicidepreventionlifeline.org.

# **COVID-19 Temporary Amendment**

#### Campus Safety Measures

To promote public safety and protect students, faculty, and staff during the coronavirus pandemic, Texas A&M University has adopted policies and practices for the Fall 2020 academic term to limit virus

transmission. Students must observe the following practices while participating in face-to-face courses and course-related activities (office hours, help sessions, transitioning to and between classes, study spaces, academic services, etc.):

- Self-monitoring—Students should follow CDC recommendations for self-monitoring. Students
  who have a fever or exhibit symptoms of COVID-19 should participate in class remotely and
  should not participate in face-to-face instruction.
- Face Coverings—<u>Face coverings</u> (cloth face covering, surgical mask, etc.) must be properly worn
  in all non-private spaces including classrooms, teaching laboratories, common spaces such as
  lobbies and hallways, public study spaces, libraries, academic resource and support offices, and
  outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain. Description of
  face coverings and additional guidance are provided in the <u>Face Covering policy</u> and <u>Frequently
  Asked Questions (FAQ)</u> available on the <u>Provost website</u>.
- Physical Distancing—Physical distancing must be maintained between students, instructors, and others in course and course-related activities.
- Classroom Ingress/Egress—Students must follow marked pathways for entering and exiting
  classrooms and other teaching spaces. Leave classrooms promptly after course activities have
  concluded. Do not congregate in hallways and maintain 6-foot physical distancing when waiting
  to enter classrooms and other instructional spaces.
- To attend a face-to-face class, students must wear a face covering (or a face shield if they have
  an exemption letter). If a student refuses to wear a face covering, the instructor should ask the
  student to leave and join the class remotely. If the student does not leave the class, the faculty
  member should report that student to the <u>Student Conduct office</u> for sanctions. Additionally,
  the faculty member may choose to teach that day's class remotely for all students.

#### Personal Illness and Quarantine

Students required to quarantine must participate in courses and course-related activities remotely and must not attend face-to-face course activities. Students should notify their instructors of the quarantine requirement. Students under quarantine are expected to participate in courses and complete graded work unless they have symptoms that are too severe to participate in course activities.

Students experiencing personal injury or Illness that is too severe for the student to attend class qualify for an excused absence (See <u>Student Rule 7, Section 7.2.2</u>.) To receive an excused absence, students must comply with the documentation and notification guidelines outlined in Student Rule 7. While Student Rule 7, Section 7.3.2.1, indicates a medical confirmation note from the student's medical provider is preferred, for Fall 2020 only, students may use the Explanatory Statement for Absence from Class form in lieu of a medical confirmation. Students must submit the Explanatory Statement for Absence from Class within two business days after the last date of absence.

# Operational Details for Fall 2020 Courses

For additional information, please review the <u>FAQ</u> on Fall 2020 courses at Texas A&M University.

# **Copyright Policies**

All printed handouts and materials posted at the websites for this course are protected by US Copyright Laws. Videos of recorded lectures are confidential. It is not allowed to share these materials with any person not enrolled in this class.