

Course Syllabus
MATH 2395.01
Discrete Mathematics
Fall 2017

Location: LDB 218
Time and Days: Tuesday, Thursday 2:00 pm – 3:20 pm
Professor: Dr. Luis David Garcia Puente
Office: LDB 421D
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course web site: Blackboard
Office hours: Monday, Tuesday, Wednesday 9:00 am – 10:00 am and by appointment.

Course Description: This is an applied course in discrete mathematical structures. Topics may include sets, logic, mathematical proof, computational complexity, relations, graphs, trees, boolean algebra, number theory, combinatorics, probability, recurrence relations, and finite state machines. This course is designed for computer science majors, so programming applications will be emphasized.

Prerequisite: MATH 1420 and COSC 1436 with grades of C or better.

Required textbook: *Discrete Mathematics: An Open Introduction*, by Oscar Levine. 2nd Edition. <http://discrete.openmathbooks.org/home.php>.

Course Objectives: Students completing this course should have mastery of the following major concepts. Other techniques and ideas will also be covered.

- Sets and Functions
- The Theory of Counting
- Sequences and Induction
- Symbolic Logic and Proofs
- Graph Theory
- Number Theory

Attendance (5%): Regular and punctual attendance for this course is mandatory. **Every undocumented/unapproved absence will lower your attendance grade by one point.** If class must be missed, the student is expected to get the notes from a classmate,

and to check Blackboard for announcements and updated assignments. For all documented and university-approved absences (e.g. hospitalization, court appearances, university athletic conferences, etc...) students must immediately contact and inform the instructor of the situation and present proper documentation upon re-entering the classroom. Students are expected to arrive to class on time. Attendance will not be recorded for anyone arriving after 10 minutes.

Homework (20%): Homework will be assigned daily and collected weekly. Assignments can be found online on Blackboard. I expect and encourage you to work collaboratively on homework, but then **to write up your own final homework paper all by yourself based on what you have learned. Thus your homework papers should not read like anyone else's since it should always be your own thoughts in your own words. You must also always acknowledge any collaborations. You are not allowed to search the internet for answers to your questions. Failure to follow these guidelines will significantly affect your grade.** I always expect to receive your homework when due, unless there are extenuating circumstances you discuss with me; speak with me if your homework must be late for a special reason. You should always hand in your homework when due even if it is incomplete. Late homework will receive only partial or no credit.

Exams (75%): There will be two midterm and one final exam during the semester. Each exam is worth 25% of your grade. You must plan to be here at the University's scheduled time for our final exam during final exam week. The exams are tentatively scheduled to occur on:

- Midterm 1: Tuesday, October 3
- Midterm 2: Tuesday, November 7
- Final Exam: Tuesday, December 5, 3:30 pm – 5:30 pm

The final exam schedule is posted in the website

<http://www.shsu.edu/dept/registrar/calendars/final-exam-schedules.html>.

Any changes to this schedule will be announced in class and posted on Blackboard. There will be no makeup exams, except for official University-sponsored activities. The course grade will be assigned via the following scale.

A	90 % – 100 %
B	80 % – 89 %
C	70 % – 79 %
D	60 % – 69 %
F	59 % or less

Academic dishonesty: All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. **Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action.** The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Classroom rules of conduct: Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Students are prohibited from using tobacco products in class, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

Use of telephones and text messagers: Cellular telephones and pagers must be turned off before class begins. Failure to comply with this instructors policy could result in expulsion from the classroom or with multiple offenses, failure of the course. Arrangements for handling potential emergency situations may be granted at the discretion of the instructor. Any use of a telephone or text messenger or any device that performs these functions during a test period is prohibited. These devices should not be present during a test or should be stored securely in such a way that they cannot be seen or used by the student. Even the visible presence of such a device during the test period will result in a zero for that test. Use of these devices during a test is considered de facto evidence of cheating and could result in a charge of academic dishonesty.

Visitors in the classroom: Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom.

Student absences on religious holy days policy: Section 51.911(b) of the Texas

Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable time frame in which the missed assignments and/or examinations are to be completed.

Disabled student policy: It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see:

<http://www.shsu.edu/dotAsset/7ff819c3-39f3-491d-b688-db5a330ced92.pdf>

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Additional information: All information on this syllabus is subject to change. Any

changes will be announced in class.