CS 0441: Discrete Structure for CS – Section 1
Fall Semester, 2023

INSTRUCTOR: Zheng Yang; **OFFICE:** Room 3-324B; **EMAIL:** zhengyang2018@scu.edu.cn

OFFICE HOURS: Monday and Wednesday 2 pm – 6 pm, Weekends by appointments
LECTURES: Tuesday 3:40 pm – 4:25 pm, 4:35 pm – 5:20 pm, 5:40 pm – 6:25 pm, Room 3-102

TA: Yiming Zhang (ME), email: 2020141520185@stu.scu.edu.cn

TA QQ group: 921064781
TA recitation hours: 3 hours per week

TEXTBOOK: *Kenneth H. Rosen. Discrete Mathematics and Its Applications (8th Edition). McGraw-Hill, 2018.*
DESCRIPTION: The purpose of this course is to understand and use (abstract) discrete structures that are backbones of computer science. In particular, this class is meant to introduce logic, proofs, sets, relations, functions, counting, probability, and graphs, with an emphasis on applications in computer science. We will cover many things from Chapters 1,2,4,5,6,7,9,and 10 in the book.

General Student Learning Outcomes: In this course, you will be expected to:

- Explore and learn the core concepts associated with the main topics.
- Develop effective written and oral communication skills.
- Begin to think abstractly about certain key notions.
- Understand how these ideas can be used to solve problems and compute things.

GRADE: The final grade will be based on the **score** which is a number between 0 and 100 determined by

Homework: 20% Quiz: 10% Class Activities and Attendance: 10%
Midterm Exam: 30% Final Exam: 30%

A: 90 – 100	A−: 85 – 90	B+: 80 – 84	B: 76 – 80	B−: 73 – 76	
C+: 70 – 73	C: 66 – 70	C−: 63 – 66	D+: 61 – 62	D: 60	F: < 60

ASSIGNMENTS: Homework assignments and their due dates will be given in the lectures. Homework must be **written in a neat form**. **NO LATE homework** (no matter what excuses you may have) will be accepted. Using computer software (such as MATLAB or ChatGPT) to do some homework is fine, but you should always explain your understanding and findings in explicit details. More specific rules for the homework submission are posted on Blackboard. Please talk with me/TAs if you are not clear about anything.

QUIZ: There will be short quizzes given during the recitations. I will drop your lowest quiz score.

EXAMS: There are two major monthly tests and a final exam. Each major test will emphasize material since the previous exam, but may include anything covered previously. The final exam will be comprehensive. There is **NO Make up for all the exams**.

ATTENDANCE: You are expected to attend all the classes. I will check the attendance and some will be used toward your grade. A student who misses a class is responsible for finding out what was covered in the class.

ACADEMIC MISCONDUCT:
All students in attendance at the Sichuan University are expected to be honorable and to observe standards of conduct appropriate to a community of scholars. The University expects from its students a higher standard of conduct than the minimum required to avoid discipline. Academic misconduct includes all acts of dishonesty in any academically related matter and any knowing or intentional help or attempt to help, or conspiracy to help, another student. These include, but are not limited to, cheating, plagiarism, fabrication of information, misrepresentation, and abetting any of the above. The Academic Misconduct Disciplinary Policy will be followed in the event that academic misconduct occurs. Students should refer to the Student Handbook.

NON-ACADEMIC MISCONDUCT: All cell phones and other electronic devices are to be turned off and out of sight while you are in the classroom. All newspapers and other materials not related to the class are to be put away once class begins. Operating these devices and reading unrelated materials while in class is disrespectful of your instructor and fellow classmates. If you fail to abide by this rule, the instructor has the right to confiscate the device or materials. If you have an emergency and need to have your phone turned on during class, ask your instructor for permission.

Tentative Progress		
Week	**Topic Sections**	**Notes**
1	1.1 – 1.2	
2	1.3 – 1.4	
3	1.5 – 1.6	
4	1.7 – 1.8	
5	2.1 – 2.2	
6	2.3 – 2.4	
7	2.5	
8	4.1, 4.3	
9	5.1 – 5.2	**Midterm Exam**
10	5.3	
11	6.1 – 6.2	
12	6.3 – 6.4	
13	7.1 – 7.2	
14	7.3 – 7.4	
15	9.1 – 9.3	
16	Selected Topics	
17		**Final Exam**