## Syllabus for CSCI 3030 $_{\text{Section A}}$ Mathematical Structures for Computer Science

Office Hours: MW 2:30 PM - 4:00 PM or by appointment.

## Text(s):

[1] Edward A. Bender and S. Gill Williamson, A Short Course in Discrete Mathematics, Dover, 2004.

[2] \_\_\_\_\_\_, Mathematics for Algorithm and Systems Analysis, Dover, 2011.

**Description:** The course prepares Computer Science majors for advanced study by emphasizing components of Discrete Mathematics related to Computer Science. The topics include sets, functions and relations, logic, Boolean algebra, graph theory, proof techniques, and matrices. Examples will emphasize Computer Science applications.

Prerequisite(s): MATH 2011 or MATH 1220, either with C or better.

Course Outline: We will cover most of the material contained in units BF, Lo, NT, SF, EO, and IS of the first book as well as some of the material contained in the unit GT of the second book.

January					February				
Mon	Tue	Wed	Thu	Fri	Mon	Tue	Wed	Thu	Fri
	1	2	3	4					1
7	8	9 Intro BF.1	10	11	4 Lo.2	5	6 NT.1	7	8
14 BF.1	15	16 BF.2	17	18	11 NT.1	12	13 NT.1 Review	14	15
21 MLK Day	22	23 BF.2	24	25	18 Exam 1	19	20 NT.2	21	22
28 BF.2	29	30 Lo.1	31		25 NT.2	26	27 NT.2	28	
		March			April				
Mon	Tue	Wed	Thu	Fri	Mon	Tue	Wed	Thu	Fri
				1	1 EO.2 Review	2	3 Exam 2	4	5
4 SF.1	5	6 Midterm SF.1	7	8	8 No Classes	9 No Classes	10 No Classes	11 No Classes	12 No Classes
11 SF.2	12	13 SF.2	14	15	15 EO.2	16	17 EO.2	18	19
18 SF.2	19	20 EO.1	21	22	22 IS.1	23	24 GT.1	25	26
25 EO.1	26	27 EO.1	28	29	29 GT.2	30	May 1 Review		

This course syllabus provides a general plan for the course; deviations may be necessary.

**Attendance:** Students are expected to attend class daily and arrive in a timely fashion. Attendance will be taken. Up to 20 points towards your final grade will be awarded based on your attendance records.

**Policy on Academic Honesty:** All students are expected to abide by the Augusta State University policy on academic honesty page 46 of Augusta State University Catalog.

**Homework/Quizzes:** Weekly homework, consisting of ten problems, will be assigned every Monday. These problems will be due following Monday. Only five random problems will be graded on a scale 0-2 and a score 0-10 points will be assigned for each individual homework. In total you may earn 100 points towards your final grade through homework.

**Project:** This course will **NOT be graded on a curve**. However, there will be one 30 points optional Python project which can increase your final grade. Specific projects will be assigned on an individual basis. If you wish to work on a project please see me during my regular office hours no later than February 15. The project submission due date is April 22.

**In-Class Exams:** There will be two 50 points in-class exams. The exams are scheduled for February 18 and April 3.

Make-Up Policy: There will be no makeups on homework/quizzes, and in-class work. To allow for excused absences, I will drop your 3 lowest homework/quizzes scores. Makeups on an exam will be given at the discretion of the instructor. A legitimate and verifiable excuse is required. If the excuse is approved, the makeup will be given within one week of the missed test.

**Final Exam:** The final exam is a <u>comprehensive</u> exam worth 100 points. The final exam will be held on Wednesday, May  $8^{th}$  from 1:00 PM - 3:00 PM in the regularly scheduled lecture room. The University's final exam regulations will be strictly followed.

**Grades:** The total number of points available in the course is 320. Grades will be no lower than those set forth in the following table.

288-320	90% to 100%	A
256-287	80% to $89.7%$	В
224-255	70% to 79.7%	С
192-223	60% to 69.7%	D
0-191	< 60%	F

**Important Deadlines:** Classes begin on January 9. Registration and add/drop ends January 11. The last day to withdraw from the course is March 6. Last day of classes is May 1.

**Student Disabilities Policy:** If you have now or develop during this semester a physical or learning disability and you want your professor to make reasonable accommodations for that, you must contact the Office of Disability Services at (706) 737-1471. Once the Office of Disability Services has received appropriate documentation, they will inform your instructors.

## Academic Assistance at ASU:

1. Math Assistance Center (MAC), Allgood Hall N337.