SYLLABUS AND COURSE INFORMATION Fall 2019 Welcome to MATH 2305-Discrete Mathematics Location: BA338

Meets 8/26/2019 through 12/13/2019, Day and Time: TR 9:30AM-10:45AM

Instructor:	Dr. Nikolay Metodiev Sirakov		
Office Hours:	M 2PM- 4PM		
	W 2PM - 4PM		
	Th. 2:30PM-3:30PM		

Office: Bin 322 E-mail: Nikolay.Sirakov@tamuc.edu Office Phone: 903 886 5943 **Office Fax: 903 886 5945**

For more information, please visit: URL: http://faculty.tamuc.edu/nsirakov

COURSE DESCRIPTION

Text: Discrete Mathematics, 5th Edition, Keneth A. Ross, Charles R.B. Wright, Prentice Hall

Course Content: Chapters 1-4, and 10.1,10.2: Sets, Sequences, Functions, Elementary Logic and Relations; Induction and Recursion, Algorithms, Digraphs, Boolean Algebra. 10.3 – Logic networks will be given in case of time permission.

Pre-requisite: MATH 2413 Min Grade C

Students Learning Outcomes: The students will learn, understand and will be able to apply the concepts of sets and operations with sets, sequences, functions, graphs, methods of proofs, diagrams and graphs, relations and partitions, induction and recursion, and Big Oh. The students will know how to determine factors and multipliers. They will learn main components of proofs, and how to apply them in practice. The students will understand the basics of algorithm, how to design, and asses the complexity of an algorithm. They will learn also the links between Boolean algebra and computers.

COURSE EVALUATION

Basis for Evaluation:

In-class Exams	- 44%
HW, In-class problems	- 14%
Short quizzes	- 16%
Comprehensive final exam	- 26%

Grading Policy:	A:	100%- 90%
	<i>B</i> :	89% - 80%
	<i>C</i> :	79% - 70%
	D:	69% - 60%
	<i>F</i> :	Less than 59 %
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The professor reserves the rights to reward students for continuous hard work.

Additional Performances: Home Practice Problems; Extra Credit Problems

Course Content & Calendar: The 1st lecture will take place on August 27th, 1st week- intro to the class and the basic concepts, 1.1-1.3; 2^{nd} week – 1.4-1.5; 3^{rd} and 4^{th} weeks-1.6 – 2.1; 5^{th} and 6^{th} weeks-2.2-2.4; 7th and 8th weeks 2.5-2.6; 9th and 10th weeks - 3.1 - 3.3; 11th and 12th weeks - 4.1-4.4; 13th and 14th weeks – 4.5-10.1; 15th week – 10.2.

During the course of study the students will be introduced to the application of Boolean Algebra to microprocessors and memory development and design.

Sections 01S, 41R, 71R; Date: Thursday, December 12 **Final Test** Time: 8AM-10AM

COURSE POLICIES

In-class activity: *Problems to be solved during the class period. Students may work in groups.*

HW: *is to be solved at home. No makeup is allowed.*

Short quizzes: are to be solved independently during the class period. No makeup is allowed.

Tests: The two in-class tests will be given roughly at regular intervals. Students will be informed of the test dates around a week in advance. The test will take one class period and will be given at the scheduled times only. No opportunity will be given to take the test at earlier or later times except in cases of formal institutional excuses as mentioned above.

Makeup: *Except in the case of a formal institutional excuse, no individual makeup test will be permitted.*

Cheating: HW, test, quizzes, extra credit problems results will be canceled in case of cheating.

Students with Disabilities: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services; Texas A&M University-Commerce; Halladay Student Services Building; Room 132 A/D; Phone (903) 886-5150 or (903) 886-5835; Fax (903) 468-8148 StudentDisabilityServices@tamu-commerce.edu

All students enrolled at the University shall follow the tents of common decency and acceptable behavior conducive to a positive learning environment (See Student's Guide Handbook, Polices and Procedures, Conduct).

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in TAMUC buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to

<u>http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmploy</u> <u>eesAndStudents/34.06.02.R1.pdf</u> and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all TAMUC campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

Nondiscrimination Notice **Texas A&M University-Commerce** will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. An environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

The road that will lead you to find a good job is the road of learning, developing and writing correct, well organized and ordered HW, quizzes and exams.