

Course Syllabus
MTH 1332.02
College Mathematics (3 credit hours)
Spring Semester 2018

Instructor: Sriyan Wickramasuriya

Class Meeting Time: MWF 11:00 am - 11:50 am

Class Meeting Place: LDB 208

Office: LDB 149

E-mail: spw015@shsu.edu

Office Hours: Tuesday 1:00 pm-4:00 pm,

Thursday 9:00 am-12:00 noon **or by appointment**

(The minute you feel you are having trouble understanding any of the material please come to office hours and I am more than happy to help you)

Topics and Motivation: We will cover chapters 2,3 and 4 and parts of chapters 9 and 1.2.

- *Chapter 2-* We will study **sets** and **how to count the number of elements** in a set and answer questions like in a softball league if every team plays every other team once how many games will be played in total?
- *Chapter 3-* The number of elements in sets is crucial in computing **probability**. Beginning with basic examples, we will then move to slightly more advanced topics like the probability rules and conditional probability.
- *Chapter 4-* We will use **statistics** to study how to compute probability when there are infinitely many possibilities involved (Like the lifetime of a tube-bulb can be 1300 hours, 1300 hours 1 minute and 28 seconds, 1450 hours and 30 seconds and it is impossible to list all the possibilities). We will answer real world questions like
What is the probability that the weight of a box of cereal is between 15.8 and 16.2 ounces?
If a professor gives an exam and the average exam score is 58 how does the professor assign letter grades?

Textbook: *A Practical Odessey*, 8th edition, by David B. Johnson, and Thomas A. Mowry

Exams and Final Exam: There will be **3 midterm exams** and a **comprehensive final**. You cannot make-up an exam except in cases of documented emergencies. In the event of serious personal family emergencies where producing a document is not possible, I will refer you to meet with the Dean of Students and let him make a recommendation about whether to give a make up exam or not.

Quizzes: There will be **five quizzes**. You cannot make-up a quiz except in cases of documented emergencies.

Homework: Homework is due at the **beginning of class in class on the due day**.

The homework will be will be graded as follows: for completeness and grading a few selected problems. **Late homework submitted within 2 days of the due date will be given 5 points**. After that late homework will not be accepted.

The following are the homework problems from each section which you need to do for the entire semester.

Homework List (*A Practical Odessey, 8th Edition by Johnson and Mowry*)

SECTION	PROBLEMS
Chapter 2.1 Sets and Set Operations	2,8,17,18,19,22,24,26,30,31,41,46
Chapter 2.2 Applications of Venn Diagrams	1,2,3,6,12,14,27,28,29,30
Chapter 2.3 Introduction to Combinatorics	2,4,6,8,10,12,14,16,18,20,22,24,30,32,36,40
Chapter 2.4 Permutations and Combinations	2,6,8,14,16,18,20,22,23,24,26,34,42,48,49,50,54,56
Chapter 3.2 Basic Terms of Probability	2,4,5,8,12,13,16,18,20,22,28,41,62,63,64,65
Chapter 3.3 Basic Rules of Probability	2,4,11,12,13,19,20,22,39,40,41,42,44,46,48,50,52,64,66,74,76
Chapter 3.4 Combinatorics and Probability	2,6,8,23,24,25,26,27,28,29,30,31,32
Chapter 3.5 Expected Value	14,16,18
Chapter 3.6 Conditional Probability	2,4,5,6,7,8,12,15,17,20,21,22,23,24,26,29,31,32,35,37,38,39,40,53,54,55,56
Chapter 3.7 Independence	2,6,13,19,20,21,22,25,32,55
Chapter 9.1 Graph Theory - Terms	7,8,9,10,15,16
Chapter 9.2 Graph Theory – Eulerian	2,4,6,8,10,14,16,18

Grades:

Quizzes: **125** points (**25** points each)

Homework: **100** points (**10** points each)

Midterm Exams: **600** points (**200** points each)

Bonus: **60** Points (not using phone) and **30** Points (responsible signing of the attendance sheet)

Final Exam: **200** points (Over selected topics)

**Final Grade=Quiz points + Homework points + Bonus points + Midterm Exam points
+Final Exam points**

THERE WILL BE NO NEGOTIATION ABOUT GRADES.

A=900 points and above

B=800-899 points

C=700-799 points

D=600-699 points

F=below 600 points

Blackboard: Please check Blackboard **at least every other day because I will upload my Lecture notes, model exams and their solutions, midterm exam solutions and your grades on Blackboard.** Please be sure to check that your grades entered are correctly. If you see that a grade is entered incorrectly you need to inform me within seven days of the grade being entered. After that I will not change any grade.

Calculator: You must have a calculator for this class and you cannot use your cell phone as a calculator. You cannot borrow a calculator during an exam. Your calculator must be able to evaluate roots, powers, exponentials, and logarithms (a scientific calculator will do this). You may use a graphing calculator on parts of some exams or quizzes, but may not be allowed to use the graphing calculator on other parts.

Cell Phone Use: Use of cell phones, smartphones, iphones (text messaging etc.) are prohibited during class time except in cases of emergency. **Using your cell phone in class will result in you losing all 60 bonus points given for not using your phone in class.** During an exam, your cell phone should be stored securely in such a way that it cannot be seen or used. The visible presence of such a device during an exam may result in a zero on the exam and is considered de facto evidence of cheating.

Class Schedule:

Date	Tentative Topic	Homework
01/17	2.1 Sets and Set Operations	
01/19	More 2.1	
01/22	Finish 2.1	
01/24	2.2 Applications of Venn Diagrams	HW 2.1
01/26	More 2.2	
01/29	Quiz 1 , Finish 2.2	
01/31	2.3 Introduction to Combinatorics	HW 2.2
02/02	2.4 Permutations and Combinations	HW 2.3
02/05	More 2.4	
02/07	More 2.4	
02/09	Quiz 2 , Finish 2.4	
02/12	Review	HW 2.4
02/14	MIDTERM 1	
02/16	9.2 Graphs and Euler Trails	
02/19	More 9.2, 9.3 Hamilton Circuits,	
02/21	3.2 Basic Probability	HW 9
02/23	More 3.2	
02/26	Quiz 3 , Finish 3.2	
02/28	3.3 Basic Rules of Probability	
03/02	More 3.3	HW 3.2
03/05	Finish 3.3	
03/07	Review	
03/09	MIDTERM 2	HW 3.3
03/12-03/16	SPRINGBREAK	
03/19	3.5 Expected Value, 1.2 Logic(Not operator)	
03/21	3.4 Combinatorics and Probability	
03/23	Quiz 4 , Finish 3.4	
03/26	3.6 Conditional Probability	HW 3.4,3.5
03/28	More 3.6	
03/30	GOOD FRIDAY	
04/02	3.7 Independence	HW 3.6
04/04	More 3.7	
04/06	Finish 3.7	
04/09	4.2 Measures of Central Tendency	HW 3.7

04/11	4.3 Measures of Dispersion	
04/13	4.1 Population, Sample and Data	
04/16	4.4 Normal Distribution	
04/18	Quiz 5, More 4.4	
04/20	Review	
04/23	MIDTERM 3	
04/25	More 4.4	
04/27	More 4.4	
04/30	More 4.4	
05/02	Finish 4.4	
05/04	Review	
	FINAL	

Further Notes:

- *Attendance* – You should attend all classes and are responsible for all announcements, assignments, quizzes, and exams given in class.
- *Academic Honesty* – The University expects all students 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.
[http://www.shsu.edu/~vaf www/aps/documents/810213.pdf](http://www.shsu.edu/~vaf/www/aps/documents/810213.pdf)
- *Religious Holy Days* – Students are excused from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. As a courtesy, it is appreciated if you notify me in advance and in writing of the dates and times that are to be missed so that appropriate arrangements can be made regarding homework and/or exams. [http://www.shsu.edu/~vaf www/aps/documents/861001.pdf](http://www.shsu.edu/~vaf/www/aps/documents/861001.pdf)
- *Students With Disabilities 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/dept/academic-affairs/documents/aps/students/811006.pdf>

- *Classroom Etiquette* - 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 eating in class, using tobacco products, 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. <http://www.shsu.edu/students/guide/StudentGuidelines2010-2012.pdf#page=29>
- *Visitors in the Classroom* – Only registered students may attend class. Exceptions can be made on a case-by-case basis. In all cases, visitors must not present a disruption to the class by their attendance. <http://www.shsu.edu/syllabus/>