

Fall 2017 - Contemporary Mathematics

Instructor: Laura Franks Email: <u>lfranks@southplainscollege.edu</u> Office: Lubbock Center, 125-F Telephone: (806) 716-4036 Office Hours: T/TH: 3:00–5:30 & F: 9:00–12:00 Other times may be available by appointment.

Course Description: MATH 1332. CONTEMPORARY MATHEMATICS I.

(3:3:0) Prerequisite: MATH 0320 or two units of high school algebra. This course is designed specifically for those students who will terminate their mathematical training with one or two courses in mathematics. It includes the fundamentals and principles of algebra; introduction to geometry and trigonometry; use of graphs, proportions, percentages, and logarithms; and heavy emphasis on applications. (Copied from the current SPC catalog.)

Textbook: Smith, K. (2017). The Nature of Mathematics, 13th Edition. Boston: Cengage Learning. 978-1133947257.

The hardcopy is optional. WebAssign will be required.

Course Objectives: Successful completion of this course should reflect mastery of the following objectives.

- 1. Apply the language and notation of sets.
- 2. Determine the validity of an argument or statement and provide mathematical evidence.
- 3. Solve problems in mathematics of finance.
- 4. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
- 5. Interpret and analyze various representations of data.
- 6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.

Texas Success Initiative (TSI): The Texas Success Initiative is a state program designed to ensure that all Texas institutions provide placement testing, personal advisement and appropriate instruction to students to enhance their opportunities for success in their college studies. All new students entering Texas colleges and universities are required to take a placement test prior to enrolling in college-level courses, unless exempt from testing under specified state standards (i.e., scores on ACT, SAT or TAKS). Testing will indicate whether a student possesses adequate basic college-level skills in reading, writing and mathematics necessary to begin an undergraduate program of study. (Copied from the current SPC catalog.)

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Attendance: Attendance and effort are the most important activities for success in this *course.* To maximize the potential to complete the course, a student should attend all class meetings, take notes, participate in class, and complete all homework assignments. Class attendance may be taken at any time during the class period, so please do not be late or leave early. You may be dropped from this course with a grade of X or F if you are absent four consecutive classes or if you exceed six absences throughout the semester. Be on time and turn off any cell phones or pagers before entering the classroom.

Assignments: Homework assignments are based on graded problems worked online via WebAssign. I encourage you to purchase your textbook immediately and use the Access Code Packet (bundled with your textbook) to register for this class online.

WebAssign: Follow these steps for a painless registration procedure.

Before you start, you will need:

- A student's access code is found in your WebAssign Student Access Kit that comes with the book.
- The class key number will be given to you the first day of class. Class Key number for your course: <u>southplainscollege 7142 4375</u>
- Or you can purchase online an access code using a credit card.
- A valid email address that you check on a regular basis.
- SPC Zip Code: 79336

To register and enroll in WebAssign from Cengage:

- 1. Go to <u>www.webassign.net/login.html</u> and click I Have a Class Key.
- 2. Enter the class key I gave you and click Submit.
- 3. If the correct class is listed, click Yes, this is my class.
- 4. Either provide your existing WeAssign account information or create a new account.

If you have and access code, use the following instructions:

- 1. Log in to WebAssign.
- 2. Select enter an access code.
- 3. Select your access code prefix.
- 4. Enter your access code and click Continue.

OR you can:

- 1. Log in to WebAssign.
- 2. Select purchase access online and click Continue.
- 3. Select items to purchase, confirm any license agreements, and click Enter payment information.
- 4. Provide your payment and contact information and click Continue.
- 5. Review your order and click Complete purchase.
- 6. Close your receipt and start working.



Important Note: The homework problems assigned online via WebAssign are required and are the only homework grades given in this class. If you do not have a personal computer or your computer is in serious need of an upgrade, there are many computer labs on the Reese Center campus, the Levelland campus, and the Lubbock Center which have very liberal hours. On the Reese campus, the lab with tutors is in building 2 in the basement. These problems on-line (homework) are chosen as representative of the basic concepts presented in the sections. These few questions will not adequately prepare you for the unit test. A more comprehensive assignment for each section is located in the textbook. The textbook exercises will not be taken up or graded, but should be used to ask questions in class over the assignment. Before completing the online homework for a grade, you should work the textbook problems for a more complete understanding of the topics.

Grading:			Grading Scale:	А	90-100
	Homework	30%		В	80-89
	Unit Exams	60%		С	70-79
	Final Exam	10%		D	60-69
				F	59 or below

Exams: There will be 4 unit tests and a comprehensive final exam. Dates for the exams are given on the course outline. If for any reason you are unable to take an exam at the designated time you must contact me *prior* to class time. Make-up exams will be given at the discretion of the instructor.

Tutoring: Free tutoring is available in room M116 of the Math Building in Levelland, or room 208 in building 2 at the Reese campus, or in the lab at the Lubbock Center. Digital versions of tutorial videos can be viewed on your personal computer on Blackboard, <u>http://spc.blackboard.com</u>. Login using "mvideos" and password "mvideos". Click on Math-Math Videos and locate the appropriate course and topic in which you are interested.

Supplies: You will need pencils, a scientific or graphing calculator, notebook paper, graph paper, and a 3-ring binder. Calculators on cell phones or other electronic devices with a computer algebra system will not be allowed during testing.

Student Conduct: You are expected to be respectful to others in the classroom. Please assist in maintaining a classroom environment conducive to learning. Any student disrupting the learning environment will be asked to leave and may be dropped from the course.

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Disability: Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland Student Health & Wellness Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

Equal Opportunity: South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability or age.

Diversity: In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College 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 South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to the SPC policy at: (http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php)

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

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Fall 2017 – Contemporary Mathematics Tentative Schedule

Week	Day	Date	Lesson
1	Tuesday	August 29	WELCOME!
	2		
	Thursdore	Amount 21	5.1 Natural Numbers &
	Thursday	August 31	5.3 Integers
2	Tuesday	Sontombor 5	5.4 Rational Numbers &
Z	Tuesday	September 5	5.5 Irrational Numbers
	Thursday	September 7	5.6 Real Numbers &
	Thursday	September /	1.3 Scientific Notation
3	Tuesday	September 12	6.1 Polynomials &
5	Tuesday	September 12	6.4 [Linear] Equations
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	Thursday	September 14	6.6 Algebra in Problem Solving
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4	Tuesday	September 19	6.7 Ratios, Proportions, and Problem Solving
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	Thursday	September 21	Exam 1
			15.1 Cranking Lines 9
5	Tuesday	September 26	15.1 Graphing Lines &
			16.1 Systems of Linear Equations
			15.2 Graphing [Linear Inequalities] &
	Thursday	September 28	15.2 Graphing [Entern inequalities] &
			15.51 unctions
			6.4 [Quadratic] Equations
6	Tuesday	October 3	15.3 Graphing Curves
			10.1 Exponential Equations &
	Thursday	October 5	10.2 Logarithmic Equations
			Ŭ I
7	Tuesday	October 10	11.1 Interest
	Thursday	October 12	Exam 2
	-		
8	Tuesday	October 17	8.1 Perimeter
	Thursday	October 19	8.2 Area &
	Thursday	October 19	8.3 Surface Area, Volume, and Capacity
9	Tuesday	October 24	8.4 Miscellaneous Measurements &
	Tuesuay		8.5 Conversions

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	Thursday	October 26	7.3 Triangles & 7.4 Similar Triangles
10	Tuesday	October 31	7.2 Polygons and Angles
	Thursday	November 2	Exam 3
11	Tuesday	November 7	7.5 Right-Angle Trigonometry
	Thursday	November 9	13.1 Introduction to Probability
12	Tuesday	November 14	13.3 Probability Models
	Thursday	November 16	13.4 Calculated Probabilities
13	Tuesday	November 21	14.1 Frequency Distributions and Graphs
	Thursday	November 23	Happy Thanksgiving!
14	Tuesday	November 28	14.2 Descriptive Statistics
	Thursday	November 30	Exam 4
15	Tuesday	December 5	Final Exam Review
	Thursday	December 7	Final Exam Review
16	Tuesday	December 12	Final Exam 5:30-7:30

*Last Day to Drop: November 16th

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