

MATH 1351 (3:3:0)

Fundamentals of Mathematics II
(Online Course)

MATHEMATICS DEPARTMENT

Division of Arts & Sciences

South Plains College
Reese Center

Spring 2018
Traci Sanders

Math for Teachers II – MATH 1351.151

1. Read the entire syllabus very carefully! When you are finished reading, scroll back to this page and reread # 1 – 5.
2. Open the Assignment List located in Blackboard under Course Information. Read the Assignment List!
3. Print the Assignment List, and put it in a place where you can refer to it often.
4. Send me a message through Blackboard in which you state the following: "I read the entire syllabus, and I accept all of its requirements. I printed the Assignment List." Type your name at the bottom of the message. Send it to me by Thursday, January 18, 11:00 pm. This email will count as your first homework grade. If it is late, I will deduct 10 points per day.
5. Register for MyMathLab at <http://pearsonmylabandmastering.com>. Click *Get Registered* in the Students box or click *Student* under Register. You will need the course ID which is **sanders25448**.

Instructor: Traci Sanders
 Office: Reese Campus, RC 223-C
 (806) 716-4616
tsanders@southplainscollege.edu
 Once class begins, all email should be sent within Blackboard.

Blackboard Website: <http://southplainscollege.blackboard.com>
 You may also access Blackboard from the SPC website.

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
10:15 – 12:15	10:15 – 11:15	10:15 – 11:15	10:15 – 11:15	9:00 – 12:00
Appointments are available for other times.				

Prerequisite: a grade of C or better in Math 1314 and Math 1350

Course Description: Topics include concepts of geometry, probability, and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking.

Purpose: Math 1351 is designed to provide the prospective elementary/junior high school teacher with some background in geometry, probability, and statistics. This course is a requirement for the Associate of Arts in Teaching (AAT) degree.

How this course is conducted: This is an online course meaning you will access course information and respond to me and/or other students through the use of the Internet. Blackboard and MyMathLab will be used to deliver and manage this course.

Technical Support

I will be glad to help you with MyMathLab (MML) and Blackboard when I can, but please contact the following for any login or technical issues:

Blackboard: Student support is available by emailing blackboard@southplainscollege.edu or calling 716-2180. When emailing a request for help, include your full name, course(s) enrolled in, name of instructor(s) and a phone number where you can be reached. There are also Blackboard video tutorials available at <http://ondemand.blackboard.com/students.htm>. You can also get to these videos by logging into Blackboard and clicking the My Blackboard tab.

MyMathLab: <http://pearsonmylabandmastering.com/students/support>
You can email or chat online. The chat online is the fastest way to reach them. The home page for MyMathLab is <http://pearsonmylabandmastering.com>. On this page, you will see a box titled Students. In this box, you will find links for “Getting Registered” and “Support”.

Text and Materials

Required Materials: MyMathLab Student Access Kit: This kit is free with the purchase of a new textbook at either SPC bookstore. You may also purchase it online at pearsonmylabandmastering.com in which you will need a credit card or PayPal. I encourage you to purchase this kit immediately. Whether you purchase MyMathLab at a bookstore or online, you will need to go to pearsonmylabandmastering.com and click on Get Registered in the Students box. If you have not yet purchased the access code, that opportunity should be provided as you go through the registration process. You will need the course ID **sanders25448**.

If you used MyMathLab last semester in Math 1350, you can use the same one again. You do not need to rebuy it! Go to pearsonmylabandmastering.com and sign in with the same username and password you used before. Click *Enroll in Another Course* above your course listings. Enter the course ID **sanders25448** and click *Continue*.

Optional Materials: Hard Copy of Textbook: [A Problem Solving Approach to Mathematics for Elementary School Teachers](#), Twelfth Edition, by Billstein, Libeskind, & Lott. The textbook is available in multimedia e-form as a part of MyMathLab, so you do not have to buy a hard copy.

Calculators: You may use a scientific or graphing calculator.

Software Requirements:

Microsoft Word 2007 or 2010 or 2013 or 2016

Adobe Acrobat Reader

MyMathLab System Requirements: Please follow the link to see the system requirements for MyMathLab.

<http://www.pearsonmylabandmastering.com/northamerica/mymathlab/system-requirements/>

Disability Statement: 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. For more

information, call or visit the Disability Services Office at, Reese Center Building 8, 806-716-4675, or Levelland in the Student Health & Wellness Office, 806-716-2577.

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 Statement: 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.

Skills and Objectives

Skills Required:

1. Basic knowledge of computer operations
2. Know how to compose, reply to, and forward email messages
3. Know how to attach and open documents in an email message
4. Know how to open and play media files
5. Time management skills

Course Learning Outcomes:

Upon completion of this course, the student should be able to do the following:

1. Compute probabilities and odds.
2. Use permutations and combinations in computing probabilities.
3. Organize data and represent the data with an appropriate statistical graph.
4. Compute measures of central tendency and measures of variation.
5. Use geometric terms to identify figures and relationships between figures.
6. Make geometric constructions using only a compass and a straightedge.
7. Graph and write equations of lines.
8. Use both the customary English system and the metric system, and be able to carry out conversions within both systems.
9. Compute linear measure, area, and volume.
10. Know the Pythagorean Theorem and the distance formula, and be able to use them in problem solving.
11. Write a detailed lesson plan for a K – 8 math class.

Class Policies

Logging Into Your Course: Under no circumstances are you allowed to give your User ID and/or passwords to anyone (for either Blackboard or MyMathLab). If someone other than you logs into this course, I will withdraw you from the course with an F, regardless of the reason. If you are taking this course with a roommate, sibling, spouse, or significant other, you must inform me of this immediately. Failure to disclose this information could result in your being withdrawn from this course with an X or F.

Attendance Policy: Attendance is monitored through the completion of assignments. Whenever you have 6 missed assignments, the instructor may withdraw you from the course with a grade of X or F. Also, if you miss two tests, you will be withdrawn from the course. Just logging in does not keep you compliant. You must be turning in work!

Academic Integrity: It is the aim of South Plains College to foster a spirit of complete honesty and a high standard of integrity. Please refer to the SPC General Catalog policy under “Academic Integrity” and “Student Conduct” regarding consequences for cheating and plagiarism. This is an online environment, and others will see your responses to discussion posts. Do not post any pictures or data that others may find offensive. You are expected to work alone on all tests and quizzes. You may use your textbook and notes for assistance. If you choose to cheat on any test, you will be withdrawn immediately from this class with a grade of F. Whether you copy someone else’s work or you allow someone to copy your work is immaterial. Cheating of any type is not tolerated.

Computer Issues: If your personal computer becomes “disabled”, there are computer labs on the Levelland and Reese campuses which you may use to access this course. Please remember that it is your responsibility to have a back up plan in place in case your computer goes down. Computer problems, mechanical failures, Internet service issues, etc. do not constitute excuses for late submission of work. Deadlines will NOT be altered. This means that you should not wait until the last minute to work on assignments!

Netiquette: No profanity under any circumstances! Respect and courtesy is required at all times. Even though we are not meeting face to face, I still expect formal/polite classroom decorum, as do your classmates. Students who decide to insult, embarrass, intimidate, or coerce other students or me will be dropped from this course immediately.

Withdrawal: If you wish to withdraw yourself from this class for any reason, you must initiate the appropriate steps on your own. If you live in the South Plains College service area, you are required to go to the Admissions Office at one of our campuses to withdraw from class. We have campuses at Levelland, Reese Center, Lubbock Center, and Plainview. If you live outside of the SPC service area, contact Amanda Morin in Admissions to get assistance for submitting student withdrawals from a lengthy distance. Ms. Morin's e-mail is amorin@southplainscollege.edu. You may contact Ms. Morin by phone at (806) 716-2570. In your e-mail, you will need to explain why you need to withdraw, your current location as to why you cannot withdraw in person, and provide a copy of your photo ID. Cc me to this e-mail. Include your full name, SPC ID number, and course and section number of the course to be dropped.

Communication: All email should be sent through Blackboard. From Monday through Thursday, I will respond to your email within 24 hours. If you email me after 12 noon on Friday, you may not hear from me until Monday morning, so do not wait until it is an emergency to email me. I do not guarantee a response to email during SPC scheduled school holidays.

Grading Policy:	Lesson Plan	5%
	Homework Average	10%
	Quiz Average	10%
	Test Average (4 tests and final)	75%

Grading Scale:	A	100 – 89.5
	B	89.4 – 79.5
	C	79.4 – 69.5
	D	69.4 – 59.5
	F	59.4 – 0

You may access your grades at any time during the course on MyMathLab by clicking on Gradebook. If you have an assignment that says past due, that assignment has not been included in calculating the overall average. Once I submit a zero for the assignment, then it will be included in the average. I will keep all your grades for this course in the MyMathLab gradebook. Work hard throughout the semester! Do not ask for extra points or for me to bump up your grade at the end of the course. You must *earn* all points that you receive.

Important Dates:	February 19	Registration Opens for Summer
	March 12 – 16	Spring Break
	April 2	Easter Holiday
	April 16	Registration Opens for Fall
	April 26	Last Day to Drop
	May 7	Final Exam Due by 11:00 PM

Topics by Section Number and Recommended Readings

- 9-1 Determining Probabilities
pp. 469 – 479
- 9-2 Multistage Experiments and Modeling Games
pp. 484 – 499
- 9-3 Applications in Probability
pp. 510 (start at “Odds” on the bottom of the page) – 515
- 9-4 Permutations and Combinations in Probability
pp. 519 – 527
- 10-1 Designing Experiments / Collecting Data
pp. 537 – 542
- 10-2 Displaying Data: Part I
pp. 545 – 557
- 10-3 Displaying Data: Part II
pp. 564 – 571
- 10-4 Measures of Central Tendency and Variation
pp. 577 – 589 (stop at Mean Absolute Value Deviation)
- 11-1 Basic Notions
pp. 621 – 635
- 11-2 Curves, Polygons, and Symmetry
pp. 640 – 651
- 11-3 More About Angles
pp. 656 – 664
- 11-4 Geometry in Three Dimensions
pp. 670 – 677
- 12-1 Congruence Through Constructions
pp. 691 – 704
- 12-2 Additional Congruence Theorems
pp. 711 – 717

- 12-3 Additional Constructions
pp. 723 – 729
- 12-4 Similar Triangles and Other Similar Figures
pp. 735 – 743
- 13-1 Translations and Rotations
pp. 757 – 767
- 13-2 Reflections and Glide Reflections
pp. 774 – 782
- 13-3 Dilations
pp. 788 – 794
- 13-4 Tessellations of the Plane
pp. 798 – 803
- 14-1 Linear Measure
pp. 813 – 822
- 14-2 Areas of Polygons and Circles
pp. 827 – 840
- 14-3 The Pythagorean Theorem, Distance Formula, and Equation of a Circle
pp. 847 – 857
- 14-4 Surface Areas
pp. 863 – 869
- 14-5 Volume, Mass, and Temperature
pp. 874 – 888

Assignments

Most assignments will be completed in MyMathLab (MML), but a few will be located in Blackboard. Please be aware of deadlines because once deadlines have passed, you will no longer have access to those assignments. You may turn your work in early if you wish. All assignments except tests will open the first day of class. Each test, including the final, will open one week prior to its deadline. Deadlines will not be changed for any reason!

Homework: There will be 25 homework assignments in MML. These homework assignments will include some media problems in which you might have to view videos and PowerPoints or participate in animations and eManipulatives. As long as you complete these media problems, you will receive credit for them. They should be very helpful for learning the material in that section. You must complete the media part of the assignment before working the problems. Homework problems given in MML may be reworked as many times as you wish, before the deadline, to get a 100 on the assignment. I encourage you to take advantage of this opportunity. After watching the videos, if you are still not sure how to work the problems, use the tab that says “Question Help” and click on “Help Me Solve This” or “View an Example”. There will also be a few worksheets that will count as homework grades. These are located in Blackboard under Course Information in the folder titled Assignments Outside MML. These will require that you type the answers in Word and send me the document as an attachment to a Blackboard message.

Discussions: There will be 2 discussions that are located in Blackboard and will count as homework grades. You can get to these from the Discussions link in the left column. You will have to make one new post, including all the required information, and at least

one reply for each discussion. As long as you do so, you will receive a 100. I will also create question and answer discussions for each chapter. If you have any questions that you want to post to the entire class, you may do so here.

Quizzes: Quizzes will be given in MML. You may submit quizzes two times, and the highest of the two grades will be counted. When you open a quiz, you will have 80 minutes to complete it unless you open a quiz less than 80 minutes before the deadline. For example, if you open a quiz 10 minutes before the deadline, then you only have 10 minutes to complete the quiz. You may use your textbook, homework, and notes.

Tests: Tests will be given in MML and may be submitted only once. Tests will open one week prior to their due dates. When you open a test, you will have two hours to complete it unless you open a test less than two hours before the deadline. You may use a hard copy of the textbook, problems that you have written down from homework or quizzes, and notes, but you will not be able to access assignments or the book in MyMathLab during the test.

Lesson Plan: The specific instructions for the lesson plan will be posted in Blackboard in the Assignments Outside MML folder. You will write a detailed lesson plan which covers objectives from the math Texas Essential Knowledge and Skills (TEKS) for a K – 8 class.

Final Exam: The final exam is comprehensive. It will cover all the sections for which homework was assigned. There are no exemptions from the final exam. The final will be given in MyMathLab and will follow the same rules as the other tests. You will have 2.5 hours to complete the final. Your grade for the course will be posted on CampusConnect after all students have completed the final.

Notes: There is a folder titled Notes under the Course Information link. These are notes that I would give on the board in a face-to-face class and should help you understand the material.

Suggestion for Learning the Material in this Course:

1. Look at the Assignment List to see what section is covered on the homework. For example, you will see that Homework 1 covers section 9-1.
2. Read the notes for section 9-1.
3. Read the recommended pages out of the textbook for this section.
4. Open the MML Homework 1 assignment. Complete the media portion of the assignment (viewing the PowerPoint and video). Work the problems. If you have trouble with a problem, you may use the “Question Help” option.
5. Move to the section listed under Homework 2 and repeat this process.
6. When it comes time for quizzes or tests, you may study the homework by clicking on the assignments in the MML gradebook.

Now scroll back to the top and reread # 1 – 5!