South Plains College
Department of Mathematics and Engineering
MATH FOR TEACHERS II: 1351.001
Fall 2018 Course Syllabus

Instructor: Kaylan K Thompson
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Office Hours: As listed or by appointment.

Monday	Tuesday	Wednesday	Thursday	Friday
9:00-10:00	1:00-2:30	9:00-10:00	1:00-2:30	9:00-12:00

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.

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.

Core Objectives: Communication Skills:

- Develop, interpret, and express ideas through written, oral, and visual communication

Critical Thinking:

- Generate and communicate ideas by combining, changing, and reapplying existing information
- Gather and assess information relevant to a question
- Analyze, evaluate, and synthesize information

Empirical and Quantitative Competency Skills:

- Manipulate and analyze numerical data and observable facts, and arrive at an informed conclusion

Textbook: A Problem Solving Approach to Mathematics for Elementary School Teachers, 12th edition, by Billstein, Libeskind, & Lott.
Required Materials: MyMathLab Student Access Kit: This kit is free with the purchase of a new textbook at either SPC bookstore or 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 **thompson25236.**

Optional Materials: 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. If you prefer to own a hard copy, you must purchase a textbook **and** the MyMathLab Student Access Kit. If you purchase a new textbook, the student access kit is free.

Supplies: Pencils, erasers, 3-ring binder, notebook paper, composition notebook, calculator (when allowed)

Attendance:

Attendance and effort are crucial for success in this course. Record of your attendance will be maintained throughout the semester. Leaving class early and being tardy will be recorded as ½ of an absence. Sleeping in class will also be recorded as an absence. You may be dropped from this course with a grade of X or F if you are absent four consecutive days or if you accrue five absences for any reason throughout the semester. Absences are not classified as 'excused' or 'unexcused'.

Student Responsibilities & Expectations:

- **Come to class on time and prepared to learn. (Pencil, book, notebook, calculator, ect.)**
- Read the syllabus.
- **Good study habits are essential for success.**
- Take notes, participate in class, and complete course assignments early enough to seek help if needed.
- Food and drink are NOT allowed in the classroom with the exception of bottled water.
- Cell phones and any other electronic devices must be silenced and put away before entering the classroom. Use of these devices during class will result in a zero for that day's quiz, homework, or exam.

Grading:

Homework/Activities/Mini Lessons	10%
Quizzes	5%
Detailed Lesson Plan	5%
Interactive Notebook	5%
Unit Exams	60%
Final Exa	15%

Grading Scale:

A	90-100
B	80-89
C	70-79
D	60-69
F	59 or below

Homework: Homework will be assigned for each section on MyMathLab (MML). The Course ID is **thompson25236** and the zip code is **79336**. Although the homework is done online, the problems should be worked neatly either in a spiral or notebook paper in pencil.

Quizzes: Quizzes will also be assigned on MML. Again, the problems should be worked neatly in either a spiral or on notebook paper in pencil.

Activities: There will be activities on a regular basis. You will receive a grade for your participation in these activities. If you are absent on the day an activity is given, you will receive a zero for that activity.

Mini Lessons: Each student will be required to prepare and teach mini lessons throughout the semester. If you are absent on the day you are to teach a lesson, you will receive a zero.

Detailed Lesson Plan:

Each student will write a detailed lesson plan. More information will be given in class. A grading rubric will also be provided.

Interactive Notebook:

Each student will complete a geometry vocabulary interactive notebook. More information will be given in class. A grading rubric will also be provided.

Exams: There are 4 unit exams (15% each) and a comprehensive final exam (15%). Dates for the exams are given on the course calendar. 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.

Religious Holy Days: In accordance with Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the first fifteen (15) days of the semester in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. "Religious holy days" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code. (copied from current South Plains College catalog)

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.

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 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.

Sexual Misconduct Statement: As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help.

It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. Dr. Lynne Cleavinger, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Dr. Cleavinger at 716-2563 or lcleavinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

Campus Concealed Carry syllabus statement:

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.

Fundamentals of Mathematics II Tentative Course Calendar Fall 2018

This is a tentative schedule. Changes will be announced in class.

MATH 1351.001 – TR 2:30 – 3:45 PM

Week	Date	**Sections covered**
1	Tues, Aug 28	9.1 Determining Probabilities
	Thurs, Aug 30	9.2 Multistage Experiments and Modeling Games
2	Tues, Sept 4	9.3 Applications in Probability
	Thurs, Sept 6	9.4 Permutations and Combinations in Probability
3	Tues, Sept 11	10.2 Displaying Data: Part I
	Thurs, Sept 13	10.3 Displaying Data: Part II
4	Tues, Sept 18	10.4 Measures of Central Tendency and Variation
	Thurs, Sept 20	Review 1, Quiz1 & Quiz 2 due in MML
5	Tues, Sept 25	***Exam 1 -- Chapters 9 & 10,*** Quiz 3 due in MML
	Thurs, Sept 27	11.1 Basic Notions
6	Tues, Oct 2	11.2 Curves, Polygons, and Symmetry
	Thurs, Oct 4	11.3 More About Angles
7	Tues, Oct 9	Interactive Notebook Set-up
	Thurs, Oct 11	Review 2, Quiz 4 due in MML
8	Tues, Oct 16	***Exam 2 -- Chapter 11***
	Thurs, Oct 18	12.1 Congruence Through Constructions
9	Tues, Oct 23	12.2 Additional Congruence Theorems
	Thurs, Oct 25	12.4 Similar Triangles and Other Similar Figures
10	Tues, Oct 30	13.1 Translations and Rotations
	Thurs, Nov 1	13.2 Reflections and Glide Reflections, Review 3, Quiz 5 due in MML
11	Tues, Nov 6	***Test 3 -- Chapters 12 & 13***, Quiz 6 due in MML
	Thurs, Nov 8	14.1 Linear Measurement
12	Tues, Nov 13	14.2 Areas of Polygons and Circles
	Thurs, Nov 15	14.3 The Pythagorean Theorem, Distance Formula
13	Tues, Nov 20	14.4 Surface Areas
	Thurs, Nov 22	**Thanksgiving Holiday (no class)**
14	Tues, Nov 27	14.5 Volume, Mass, and Temperature
	Thurs, Nov 29	Review 4, Quiz 7 due in MML
15	Tues, Dec 4	***Test 4 -- Chapter 14***
	Thurs, Dec 6	Review for Final Exam
16	***Tues, Dec 11***	***Comprehensive Final Exam***
		1:00 pm – 3:00 pm

Important Dates: September 3: Labor Day Holiday
October 12: Fall Break (no office hours)
October 26: Deadline for lesson plan conference
November 8: Interactive notebook 11-1 definition entries due
November 15: Last day to drop
November 20: Lesson plan due
November 21-23: Thanksgiving Holiday
December 4: Interactive notebook due