Course Information Sheet

Course: Math 206-01 - Math for Elementary Teaching II - 4 Credit Hours - Spring 2015
IAI Code: M1 903
Delivery Mode: Face-to-face
Meeting Time: MW 10am-11:40am
Meeting Place: Room 2625

Instructor: Steve Kifowit, Rm 2305, Ph. (708) 709-3954
Email: skifowit@prairiestate.edu
Web: http://stevekifowit.com
Office Hours: MTWTh 9am-10am, TTh 1:15pm-1:45pm, or by appointment

Text: A Problem Solving Approach to Mathematics for Elementary School Teachers; 11th edition (2013); Billstein, Libeskind, & Lott

Course Description: This course is a continuation of Mathematics for Elementary Teaching I. Topics covered include geometry, probability, statistics, and measurement. Mathematical reasoning and problem solving are emphasized. This is the second course in a two-semester sequence recommended to meet the requirements for teacher certification in Illinois. It is not a methods course in teaching mathematics. This course provides general education credit for elementary education majors.

Course Prerequisite: Math 200, Mathematics for Elementary Teaching I, with a C or better

Course Goals/Objectives: In addition to satisfying PSC's general education mathematics objectives, successful Math 206 students will be able to:
1.) Use spatial visualization and geometric modeling to explore and analyze geometric shapes, structures, and their properties.
2.) Solve computational and application problems related to data analysis, statistics, and basic probability.
3.) Recognize the measurable attributes of an object and apply the units, systems, and processes of measurement.

Attendance Policy: Regular class attendance is an essential component of successful learning. Students are responsible for prompt attendance and participation in all class meetings. If you miss class, you will not be allowed to make up any tests, quizzes, or homework assignments that you may have missed. All material covered in class is the student's responsibility.

Grading: Your grade will be based on your performance on three 50-point tests, a 75-point final exam, approximately ten 5-point quizzes, and miscellaneous problems (0-50 points). Very roughly, tests count for about 55% of your grade, the final exam counts for about 27%, and quizzes count for about 18%. The grading scale is as follows:

A --- 88% and above
B --- 77% - 87%
C --- 66% - 76%
D --- 55% - 65%
F --- below 55%

You may estimate your current grade at any time during the semester by computing the following percentage: 100% * (Total points accumulated) / (Total points possible). Please feel free to discuss your grade with me at any time during the semester. Throughout the semester, grades will be posted online at http://www.engrade.com/skifowit.

Homework: Homework problems will be assigned on a daily basis. Your work will not normally be collected, but we will often discuss homework problems in class. If any suggested homework problems are to be submitted for grading, you will be given advance notice of at least one class period. Keep up to date on your homework! Homework problems will often show up on quizzes and tests.

Tests/Exams: Test problems will be similar to class examples, quiz problems, and homework problems. Some test problems may be multiple choice, but you should also expect computational problems and writing problems. Partial credit may be awarded on any type of problem, but only for correct work. You must work individually on all tests. No make-up tests will be given. At the end of the semester, your lowest test score will be replaced by two-thirds of your final exam score (if this helps you).

Quizzes: Be prepared for a five-point, in-class quiz on each Wednesday (unless a test is scheduled). No make-up quizzes will be given. All quiz work is to be done on an individual basis unless otherwise stated. At the end of the semester, your lowest quiz score will be dropped.

Final Exam: The final exam is comprehensive and will be worth 75 points toward your final grade. The final exam counts for more than 25% of your grade. Please take it seriously! See the lecture pace for the date of the final exam.

Calculators: A scientific calculator with statistical functions is required for this course. The TI-83 or TI-84 are the recommended calculators.

Reading Assignments: Reading assignments will be given throughout the semester. The material covered in your readings will appear on tests and quizzes, even if it never comes up in class.

Disability Statement: Any student needing to arrange reasonable accommodations for a documented disability (learning, physical, psychological, or other) should contact the Disability Services Office (Room 1192).

Religious Observance Accommodation: Prairie State College is required to excuse students who need to be absent from class, examinations, study, or work requirements because of their religious beliefs, and provide students with a make-up opportunity, unless to do so would unreasonably burden the institution. Students must notify their instructor well in advance of any absense for religious reasons. If you require special accommodations for observance of a religious holiday, please notify me during the first week of the term.

Misc. information:
1.) The last day to withdraw from the course is April 10. For refund information, refer to the spring schedule book. If you wish to withdraw from the course, it is your responsibility to do so. Any student who does not come to class, yet fails to withdraw, will be given the FW grade.
2.) You are expected to spend roughly 12 hours per week on coursework - 4 hours in class and 8 hours out of class. If you cannot make this commitment, you may want to reconsider taking this course.
3.) The grading scale will be strictly adhered to! Final percentages will be rounded to the nearest whole number.
4.) You will eventually be required to have a compass, straight-edge, protractor, and ruler (with inches and centimeters).

Course information, including tests, quizzes, and answer keys, can be found at http://stevekifowit.com /classes/m206.htm

Lecture Pace

Math 206-01 - Math for Elementary Teaching II

Week 1	Jan 12	Course information, Topics from Chap 7	Real numbers **(No class on Wednesday)**
Week 2	Jan 21	Topics from Chap 7, Section 8.1	Real numbers **(No class on Monday)**
Week 3	Jan 26 & Jan 28	Sections 9.1, 9.2	Probability
Week 4	Feb 2 & Feb 4	Sections 9.2, 9.4	Tree diagrams, Odds, Expected vlaue
Week 5	Feb 9 & Feb 11	Review, **Test 1**	
Week 6	Feb 16 & Feb 18	Sections 9.3, 10.1-10.3	Simulations, Displaying data
Week 7	Feb 23 & Feb 25	(Read 10.1-10.3) Section 10.4	Displaying data, Central tendency
Week 8	Mar 2 & Mar 4	(Read 10.5) Section 10.4	Variation, Normal distribution
Week 9	Mar 9 & Mar 11	Review, **Test 2**	
Week 10	Mar 16 & Mar 18	**Spring Break**	***** No class *****
Week 11	Mar 23 & Mar 25	Sections 11.1, 11.3	Intro to geometry, Polygons
Week 12	Mar 30 & Apr 1	Sections 11.4, 12.1, 12.2	Angles, Triangle congruences, Constructions
Week 13	Apr 6 & Apr 8	Sections 12.2, 12.3	Triangle congruences, Isosceles triangles, Constructions
Week 14	Apr 13 & Apr 15	Section 12.4, **Test 3**	Similarity
Week 15	Apr 20 & Apr 22	Sectons 11.2, 14.1	Linear and area measure
Week 16	Apr 27 & Apr 29	Sections 14.1, 14.2, 14.3	Area measure, Pythagorean theorem, Space figures
Week 17	May 4 & May 6	Sections 14.4, 14.5	Surface area, Volume
*******	Wednesday, May 13	**Final Exam** --- 10:00am-11:50am	

***** April 10 is the last day to withdraw *****

Suggested Homework Problems
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Section 7.1A #'s 1,2,5,6,7
Section 7.1B #'s 6,7,14
Section 7.1 #'s 5,7
Section 7.3A #'s 1,2,4,6,9,13a
Section 8.1A #'s 1,2,4,7,8,10,17
Section 8.1 #'s 2,3,4,5

Section 9.1A #'s 1,2,3,5,7,10,11,12,13,14,15
Section 9.1B #'s 4,9,10,14
Section 9.1#'s 1,2,11,12,13,15
Section 9.2A #'s 1,2,3,4,6,9,11,14,17
Section 9.2B #'s 2,4,6,14
Section 9.4A #'s 1,3,5,6,8,10,11,14,16
Section 9.4B #'s 6,8,11
Section 9.3A #'s 3,4,8,9
Section 9.3 #'s 2,4,5,9

Section 10.2A #'s 1,3,4,5,7,8,10,12,13,16
Section 10.2 #'s 2,3,4,5
Section 10.3A #'s 1,2,5,6,10,11,12
Section 10.4A #'s 1,3b,4,5,8,9,10,13,15,17,18,19,20,23,24
Section 10.4 #'s 1,4,5,13,14,18,19

Section 11.1A #'s 2,3,5,6,7,9,14
Section 11.1 #'s 6,7,8,9,11
Section 11.3A #'s 1,3,4,5,6,9,11,13
Section 11.3B #'s 12
Section 11.3 #'s 2,4,6,14
Section 11.4A #'s 2,3,4,5,7,8,9,10,12,14
Section 11.4 #'s 1,2,3,7

Section 12.1A #'s 4,5bcdeg,7,8,12,14
Section 12.2A #'s 3,7,8,9,16
Section 12.3A #'s 1b,4a,7a,13,15
Section 12.4A #'s 2,4,5,11,12

Section 11.2A #'s 3,9,14,16

Section 14.2A #'s 2,6,10,15
