email: ca.spengel@csun.edu   web: www.csun.edu/~cas24771
Telephone: use email   Math Office: 677-2721
Office Hours: MW 20:15-20:45 @ SH276   (and other times by appointment)

Dates & information contained herein may be amended as required. Check the Notices page.

COURSE OBJECTIVES:

The successful student will learn the fundamental concepts of probability, descriptive statistics and geometry, in accordance with the California Standards, and gain insight into mathematics, mathematical reasoning, problem-solving, explanation and assessment.

MATERIALS:

Text: A PROBLEM SOLVING APPROACH TO MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS 9/E (ninth edition) by Billstein, Libeskind & Lott. (There is a special edition in the bookstore that contains only chapters 7-13, but you might do just as well price-wise looking for a full edition. Pro: It's a good reference book for all elementary math topics. Con: heavy to carry.)

Miscellany: Usable compass *, straightedge, protractor; clean-edged 8.5"x11" paper, pencils & erasers.
Optional: colored pencils or pens. Very Optional: Mira®   ...Calculator– may not be used on tests.

COURSE REQUIREMENTS:

1. Attendance & class participation: Class participation is a part of this class.
Your questions, answers and comments contribute to the learning experience of the class.
Attendance will be taken by means of a sign-in sheet.   Always sign in.
Points for attendance & participation will be added to your "HQA" total (see 2).

2. Work & Quizzes:
Preparation for class & exercise (i.e. class/group-work & homework) are vital to learning mathematics.
You should read each section, unless advised otherwise, before it is discussed in class.
Assigned exercises should be completed as the topics are covered.
Homework assigned each class meeting, and collected at announced due dates; do it to learn from it.
Impromptu quizzes will be given on homework and on topics discussed in class.
Late homework is NOT accepted; there are NO makeups for quizzes (nor, with rare exception, tests).
Including attendance points, your HQA (homework, quiz & attendance) points will be computed:
(200 pts)·(Your HQA pts) / (Highest Student HQA Total) = Your HQA total. (Possible HQA pts: 200.)

3. Tests: There will be 3 (possible 4th only if time permits) one-hour tests at 100 points each.
Your lowest test score may be replaced by your score on the final exam.
NO make-ups; if you miss a test, that's the one replaced. Total possible Test Points: 300.

4. Final examination: The common final exam is on Saturday, May 9, 2009, at 11:30-13:30.
Questions will be similar in style & content to the practice final (on-line). Prepare well! Pts: 300.

5. Miscellaneous Requirements:
¤CSUN policy requires students to initiate and check their CSUN email accounts for official notifications.
¤ All written work must be organized, legible and appropriately labeled with section & problem #s, etc.
¤ Calculators will not be allowed on the tests & final, so if you use one, don't be dependent on it.
¤ Class participation is welcome and necessary; behavior appropriate to a university classroom is required.
¤ Any writing assignments will be graded on writing skills in addition to mathematical content.
¤ The following are NOT ACCEPTED: papers torn from spiral notebooks ("ruffled" edges); miniature, oversize, or day-glo colored papers; writing too faint to be read under artificial light.
¤ Reminder: Keep current on your work: there are NO make-ups for tests, quizzes or homework.

GRADES:

Grades are based on points earned as described above; + & - grades are assigned. Each component (HQA, tests, final exam) comprises part of the grade; all are important.   If you are unsure of your prospects at any point, talk to me–   Do NOT assume!   Now for the guarantee: if, out of the 800 points possible, you earn 720 points , you have an A; 640, a B; 560, a C; 400, a D... with this one exception:
 Academic dishonesty, or cheating,** on any quiz or test merits an F for the course.
(**See http://www.csun.edu/a&r/soc/studentconduct.html - behaviors, particularly items 1 & 20.)

COMMENTS:

I will be available at the above-listed times for your convenience. If you have trouble with a topic, do not delay seeking help; help is available from me, the Math 210-310 tutorial in SH274, and from fellow students. Many students have found group study very beneficial to their understanding and enjoyment of this course. Review & help sessions may be held outside of class at announced times.

This course includes more material than can be covered thoroughly in class time since much of it relies on skills that "should" have been mastered in prior courses. As a college student, you are responsible for filling in the gaps. Algebraic skills are necessary. In previous semesters, students have been required to complete an algebra skills mini-course called "ALEKS". The State has negotiated a reduced license fee for CSU students to use this well-designed software. A few individuals did not need such a review, so the mini-course is now optional. Step-by-step instructions for purchasing and logging on to this program are at this ALEKS purchase link. If you are unsure of your need for this mini-course, try it out at this ALEKS free trial site.

Do not assume that you know the material just because it looks familiar, or easy, in class.
Try the homework exercises as early as possible each week, even before the material is covered in class.
Don't let anything "slide", keep your studies up-to-date. Make this a most productive and rewarding semester!

MATH 310 #15808, 15395 TOPICS SCHEDULE & Assignments   Spring 2009

Please note the ONLY holidays are Jan 19, Mar 31, and Apr 6-11; classes are held on all other weekdays from January 19 through May 8. Also note your final exam is Saturday, May 9, 2009.
SEE http://www.csun.edu/a&r/soc/pdf/spring.pdf

For each class meeting: Read the section of the text prior to class meeting, preview assigned problems. Problems listed are those from the textbook; additional problems will be assigned.

Get the textbook NOW. If there is any obstacle, speak to me immediately.

Anticipated Schedule (subject to change as necessary):

Week	Dates	Notes
1	1/19-23	No class Monday, 1/19. Probability: §§ 7.1, 7.2
2	1/26-30	Probability: §7.4
3	2/2-6	Statistics §8.1
4	2/9-13	Statistics §8.2
5	2/16-20	Geometry §9.1 Test #1
6	2/23-27	Geometry: §9.2 , 9.3
7	3/2-6	Geometry: §§ 9.4, 10.1
8	3/9-13	Congruence Geometry §10.2, 10.3
9	3/16-20	Congruence Geometry §§10.3, 10.4
10	3/23-27	Test #2; Measurement §11.1, 11.2
11	3/30-4/3	Measurement §§11.3, 11.4 – Test #3
	4/6-11	Spring break; no class meetings
12	4/13-17	Test #3
13	4/20-24	Transformation Geometry §§12.1, 12.2,
14	4/27-5/1	Transformation Geometry §12.3
15	5/4-5/8	Review; Final exam is Saturday, 5/9 ! ! ! (Location will be announced)

Assignment List (very few changes will be necessary):

Probability: §§ 7.1, 7.2, 7.4
1. § 7.1 Read. Answer assessment exercises (p 443) # 1-3 6 7 9-11 14 15 16 21 22 23 29
2. § 7.2 Answer (p 461) # 1 3 6 10 24 31 35*
3. § 7.4 Answer # 1 3 5 7
4. Complete exercises on "PN" handout.

Statistics: §§ 8.1, 8.2 (need protractor now)
5. §8.1 (p. 517) Do # 2a 7bc 8 10a 12a 17 21 25
6. §8.2 (p. 545) Do # 1ace 2 3 4 6 7 9b 11 13
7. Complete exercises on pages "DSB" handout.
8. Practice Final Problems sections A & B (Practice Final Problems Here)
9. Review for Test #1 chapters 7 & 8

Intro Geometry: §§ 9.1, 9.2, 9.3, 9.4 (need compass now)
10. §9.1 # 1a 2 4 5 7ab 8ab 9a 10 12ab 19 20ab
11. §9.2 # 1 3 4 5 7 8 9a 11b 20
12. §9.3 # 1-9 10b 12 15 17 19a 23ac 25
13. §9.4 # 1 2 4 6ab 7b 9 10 24 25
14. Practice Final problems sections D-F

Congruence Geometry §§10.1, 10.2, 10.3, 10.4, 10.6 partial
15. §10.1 # 1 3 4cd 20
16. §10.2 # 1d 2d 5 6 7 9 12 30 33abc
17. §10.3 # 5 7 22
18. Complete the constructions on EC handout
19. §10.4 Similarity questions handout
20. Geometer's Sketchpad assignment* (Print it here)o
21. Practice Final Problems sections G-I
22. Review for Test #2 chapters 9 & 10

Measurement §§11.1, 11.2, 11.3, 11.4, 11.5
23. §11.1 (p.746) # 1-7 8 12aceg 15 17aceg 20a 27
24. §11.2 (p764) # 2ace 4ac 5ac 7ace 9ac 12 14a 16ace 18 21 26a 28a 29aceg
25. §11.3 (p781) # 1a 2ahi 3c 16a 32
26. §11.4 (p793) #1, 12
27. §11.5 (p798) #1aceh 2   4   5ceh
28. Complete problems per handouts (M, A, SA, V, Sim)
29. Practice Final Problems sections C, J, K, L
30. Review for Test #3 measurement

Transformation Geometry §§12.1, 12.2, 12.3
31. Chapter 12 problems per handouts (TG & Sym)
32. Practice Final Problems section
33. Review for Test #4 (may cover the remainder)
34. REVIEW FOR THE FINAL !

Final Exam 11:30 PDT Saturday May 9, 2009.

Advice to College Students- on-line, on the General Notices page.