CASPER COLLEGE COURSE SYLLABUS

COURSE NUMBER & TITLE: MATH 1000, Section 4, Problem Solving

SEMESTER: Fall 2006

LECTURE HOURS: 3       CREDIT HOURS: 3

CLASS TIME: 11:00-11:50 AM       DAYS: MWF       ROOM: PS 119

INSTRUCTOR’S NAME: Diane Ginsbach       EMAIL: ginsbach@caspercollege.edu

INSTRUCTOR’S OFFICE: PS 130       PHONE: Office 268-2866
                                      Academic Assistant 268-2513

OFFICE HOURS: Monday 12 - 12:50 PM
              Tuesday 7 – 7:50 AM
              Wednesday 9 - 9:50 AM & 12 - 12:50 PM
              Thursday 11- 11:50 AM
              Friday 9 - 9:50 AM
              or by appointment.

COURSE DESCRIPTION: Focuses on the strategies of problem solving. Topics in the course are taken from financial mathematics, set theory, logic, probability, statistics, and discrete mathematics.

PREREQUISITE: A “C” or better in DVST 0920, or an ACT score of 21 or better within the past year, or an appropriate COMPASS Exam score.

GENERAL OBJECTIVES: The general objectives are:
1. Approaches to Problem Solving
2. Financial Management
3. Statistics
4. Probability
5. Voting

SPECIFIC OBJECTIVES (Outcomes): The specific objectives are:
1. Working with units
2. Standardized Units
3. Problem-Solving Guidelines and Hints
4. Percentages
5. The Power of Compounding
6. Savings Plans and Investments
7. Loan Payments, Credit Cards, and Mortgages
8. Income Taxes
9. Statistical Tables and Graphs
10. Characterizing a Data Distribution
11. Measures of Variation
12. The Normal Distribution
13. Fundamentals of Probability
14. Combining Probabilities
15. The Law of Large Numbers
16. Assessing Risk
17. Counting and Probability
18. Voting: Does the Majority Always Rule?
METHODOLOGY: I plan to teach this class with short lectures followed by examples and then interspersed with student/team activities. I would like to implement some small group work where appropriate. Please feel free to ask questions at any time. I encourage small group, math related discussions during the activities.

EVALUATION CRITERIA: Homework is assigned every class period. Remember you are in college and it is your RESPONSIBILITY to complete the homework! Always make sure and get your questions answered. There will be announced and/or unannounced and/or take-home quizzes throughout the semester. There will be correction assignments for each test. Each quiz and assignment will be worth 10 points. I will drop one to three 10 point assignments for the semester. The remaining 10 points assignments will be added to your cumulative point total. Additionally, there might be some other assignments for points during the semester.

At the most there will be a test over each chapter with possibly some chapters combined (maximum of 5 chapter tests). They will be worth approximately 100 points each. There will be a comprehensive final exam (8-10 AM Thursday, Dec 21st) worth at most 150 points. Grades are determined by the total points earned divided by the total points for the semester (90%+ A, 80-89% B, 70-79% C, 60-69% D, 59% and below F). Keep track of your points throughout the semester so you will always know your grade. Please let me know ahead of time if you are unable to make it to class for an exam. These need to be made up before the test date.

REQUIRED TEXTS, READINGS, MATERIALS: Using and Understanding Mathematics A Quantitative Reasoning Approach (3rd edition) by Bennett and Briggs, calculator, graph paper and a ruler. A graphing calculator is strongly recommended. (TI-73 for Elementary Ed. majors and TI-83 or TI-84 for students needing a statistics course.) Graphing calculators can be leased from the Math Learning Center.

LAST DATE TO CHANGE TO AUDIT STATUS OR TO WITHDRAW WITH A “W” GRADE: Friday, October 27, 2006

STUDENT RIGHTS & RESPONSIBILITIES: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College student. It is the policy of Casper College to provide appropriate accommodations to any student with a documented disability. If you have a need for accommodation in this course, please make an appointment to see me at your earliest convenience. If you have any problems with this class, please go through the proper chain of command: myself, Head of the Math Department, Division Chair, VP Student Services, VP Academic Affairs.

TENTATIVE SCHEDULE WITH COURSE CONTENT: We will cover most or part of Chapters 2, 3, 4, 5, 6, 7, and 12 from the required text. We will cover at most 1 section each class period and homework will be assigned after each section.

My best suggestions for succeeding in this class are:
1. Attend class.
2. Complete the homework.
3. Get your questions answered.

Remember the best ability anyone can have is respons”ability”! 😊