



Peru State College
MATH 110-00B Elements of Mathematics
Syllabus – Spring – 2012

Instructor: Joan Albury

**Office Hours: MW 9:30- 12:15pm, TT 11:00-3:15pm
F 9:00am-12:00pm (CATS 15)**

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Course Meets: TT 3:30pm-4:45pm CATS 201

Required Textbook:

Topics in Contemporary Mathematics, 8th Edition by Bello and Britton
ISBN 0-618-34752-6

The material covered in this course roughly corresponds to chapters 1-3 and 5-8 in the text.

Required Software:

None required. Any software that might be used is available on campus.

Course Description & Objectives

This course is designed to give the non-mathematical student the opportunity to use basic operations, succeed in mathematical modeling and understand deductive and inductive reasoning. The general concepts covered will include sets, logic, the number system (natural numbers through the real numbers), equations, inequalities, problem solving, graphs, functions and geometry.

Prerequisites: None.

Upon completion of this course you should be able to:

1. Apply mathematical concepts to real world situations
2. Use data, deductive and inductive reasoning, and logical thinking to assist in decision making
3. Investigate patterns that appear repeatedly in business, history, science, art, and other aspects of the human experience

At the beginning of the course, we will discuss how these objectives fit into the College's and School's mission and goals. The instructor reserves the right to modify any aspect of the course syllabus or content. Any modifications will be communicated to students in advance.

Expectations & Instructional Approach

Classes will include primarily lecture and small group work. The single, most effective strategy for learning mathematics is to remain engaged with the material over the entire semester. This includes investing an appropriate amount of time outside of class (I suggest about 6 hours each week) in preparing for lectures, completing assigned homework problems, and working with others (such as fellow students, the instructor, and a tutor). During my office hours, I am essentially a tutor on-call for you at no additional charge. I encourage you to take advantage of this early and often.

Attendance and participation are vital to the learning experience. Consequently, I expect you to be at each class having read the material and ready to participate in the day's discussions and exercises. Please be in class on time. In order to foster a climate conducive to learning, please join me in treating your classmates with respect. I encourage students to ask questions, seek my help when they need it, and help their classmates understand the material.

Assessment and Grading

Your grade will be determined by homework, six exams, weekly quizzes, and a comprehensive final exam.

Class Attendance and Participation:

As mentioned previously, attendance and participation are crucial to your learning. Poor attendance will adversely affect quiz scores and exam scores.

Weekly Assignments:

Nearly every week there will be a quiz during the first course meeting of the week. This quiz will be over the course material of the previous assignment.

Homework:

For each section of course material, I will assign a list of suggested homework problems. This list is for your benefit, since our lectures will focus on preparing you to solve problems of this kind. You should have completed or at least attempted each problem before the next class meeting. I will begin each class by asking for questions related to homework from the previous day(s). At various times these assignments will be collected and or used as an aid to complete the quiz.

Exams:

Exams will be closed book, timed, in-class exams. The final exam will be comprehensive and will be counted twice (200 points). It will be split into six sections (one for each test) and can be used to replace one failing grade that was earned during the semester.

Generally speaking, you will need a calculator for this course and you will be allowed to use a calculator on the exams and quizzes in this course. You will not be allowed to use your phone as a calculator on any tests or quizzes. The TI-30XI (and the solar powered version, the TI-30XIIS) is an inexpensive calculator that is more than sufficient for this course.

In order to receive full credit for problems on quizzes and exams, I expect students to show enough work to demonstrate mastery of the course material. You are here to learn valuable quantitative problem solving skills. Technology can supplement and enhance these skills, but it cannot replace them.

There is a free graphing calculator application available at <http://cauchy.peru.edu>. Also, the website www.wolframalpha.com might be of some use.

Grading Scale

Your final grade will be based on the aforementioned exams, quizzes, homework, and final exam. The grading scale is as follows.

A	≥ 90 and ≤ 100
B	≥ 80 and < 90
C	≥ 70 and < 80
D	≥ 60 and < 70
F	< 60

Points for each assignment are as follows.

Exams	600 (100 each)
Quizzes	100 (10 each)
Homework	100 (10 each)
Final Exam	200

College's Incomplete Coursework Policy

To designate a student's work in a course as incomplete at the end of a term, the instructor records the incomplete grade (I). Students may receive this grade only when serious illness, hardship, death in the immediate family, or military service during the semester in which they are registered prevents them from completing course requirements. In addition, to receive an incomplete, a student must have completed substantially all of the course's major requirements.

Unless extenuating circumstances dictate otherwise, students must initiate requests for an incomplete by filling out an Incomplete Grade Completion Contract, which requires the signature of the student, instructor, and Dean. The Incomplete Grade Completion contract cites the reason(s) for the incomplete and details the specific obligations the student must meet to change the incomplete to a letter grade. The date by which the student agrees to complete required work must appear in the contract. The Dean, the instructor, and the student receive signed copies of the Incomplete Grade Completion Contract.

Even if the student does not attend Peru State College, all incomplete course work must be finished by the end of the subsequent semester. Unless the appropriate Dean approves an extension and if the student does not fulfill contract obligations in the allotted time, the incomplete grade automatically becomes an F.

College's Academic Integrity Policy

The College expects all students to conduct themselves in a manner that supports an honest assessment of student learning outcomes and the assignment of grades that appropriately reflect student performance. It is ultimately the student's responsibility to understand and comply with instructions regarding the completion of assignments, exams, and other academic activities. At a minimum, students should assume that at each assessment opportunity they are expected to do their own original academic work and/or clearly acknowledge in an appropriate fashion the intellectual work of others, when such contributions are allowed. Students helping others to circumvent honest assessments of learning outcomes, or who fail to report instances of academic dishonesty, are also subject to the sanctions defined in this policy.

Instances of academic dishonesty may be discovered in a variety of ways. Faculty members who assign written work ordinarily check citations for accuracy, run data base and online checks, and/or may simply recognize familiar passages that are not cited. They may observe students in the act of cheating or may become aware of instances of cheating from the statements of others. All persons who observe or otherwise know about instances of cheating are expected to report such instances to the proper instructor or Dean.

In order to promote academic integrity, the College subscribes to an electronic service to review papers for the appropriate citations and originality. Key elements of submitted papers are stored electronically in a limited access database and thus become a permanent part of the material to which future submissions are compared. Submission of an application and continued enrollment signifies your permission for this use of your written work.

NSCS Board of Trustees Policy 4220 states that each College “. . . will establish a distance learning assessment policy that will include, at a minimum, a substantial culminating experience that is proctored.” Peru State College’s policy is that each course that is offered entirely online will feature a proctored final exam that substantially measures the extent the course’s stated learning objectives are achieved. Online course syllabi will clearly state that, regardless of grades earned previously, the proctored final exam must be passed in order to receive credit for the course. Courses which feature graded site-based activities (e.g., teaching demonstrations) and/or video-taped presentations that occur near the end of the term, and that are designed to substantially assess the achievement of learning objectives, can be considered in compliance with this policy. Project-based capstone and graduate courses utilizing real-time discussions held by web-cam, phone or in person with the faculty member as part of the assessment process can also be considered in compliance with this policy.

Should an occurrence of academic misconduct occur, the faculty member may assign a failing grade for the assignment or a failing grade for the course. Each incident of academic misconduct should be reported to the Dean and the Vice President for Academic Affairs (VPAA). The VPAA may suspend students for two semesters found to be responsible for multiple instances of academic dishonesty. The reason for the suspension will be noted on the student’s transcript.

A faculty member need present only basic evidence of academic dishonesty. There is no requirement for proof of intent. Students are responsible for understanding these tenets of academic honesty and integrity. Students may appeal penalties for academic dishonesty using the process established for grades appeals.

Title IX Compliance Notice

Peru State College is an equal opportunity institution. PSC does not discriminate against any student, employee or applicant on the basis of race, color, national origin, sex, disability, religion, or age in employment and education opportunities, including but not limited to admission decisions. The College has designated an

individual to coordinate the College's nondiscrimination efforts to comply with regulations implementing Title VI, VII, IX, and Section 504. Inquiries regarding non-discrimination policies and practices may be directed to Eulanda Cade, Director of Human Resources, Title VI, VII, IX Compliance Coordinator, Peru State College, PO Box 10, Peru, NE 68421-0010, (402) 872-2230.

Students requesting reasonable accommodation and tutoring services should contact the Center for Achievement and Transition Services (CATS).

Tentative Course Schedule

Week	Tuesday	Thursday
1	Syllabus & 1.1	1.2 & 1.3
2	2.1 (Quiz Ch. 1)	2.2 & 2.3
3	2.4 & 2.5 (Quiz 2.1- 2.3)	Wed. night review Test Ch.1 & Ch. 2
4	3.1 & 3.2	3.3 & 3.4 (Quiz 3.1 & 3.2)
5	3.5 & 3.6 (Quiz 3.3 & 3.4)	Wed. night review Test Ch. 3
6	5.1 & 5.2	5.3 & 5.4 (Quiz 5.1 & 5.2)
7	5.5 & 5.6 (Quiz 5.3 & 5.4)	5.7 & 5.8 (Quiz 5.5 & 5.6)
8	Review Ch. 5	Test Ch. 5
9	MID-TERM BREAK	NO CLASS
10	6.1 & 6.2	6.3 & 6.4 (Quiz 6.1 & 6.2)
11	6.5 & 6.6 (Quiz 6.3 & 6.4)	Wed. night review Test Ch. 6
12	7.1 & 7.2	7.3 & 7.4 (Quiz 7.1 & 7.2)
13	7.5 & 7.6 (Quiz 7.3 & 7.4)	Wed. night review Test Ch. 7
14	8.1 & 8.2	8.3 & 8.4 (Quiz 8.1 & 8.2)
15	8.5 & Review	Test Ch. 8
16	Ch. 13 main points	Ch. 13 main points
Exam Week	Final Exam	