Computational Linear Algebra
Math 365 Section 1
Spring 2008
Course Syllabus

CLASS INFORMATION:
Course Number: Math 365 Section 1
Class Times: TR 1:00-2:15pm
Class Location: CBC-C 221

INSTRUCTOR INFORMATION:
Name: Dr. Bellomo
Office Location: CBC-B Room 507
Office Phone: (702) 895-0358
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Office Hours: TR 11:45am – 1:00pm, or by appointment

COURSE DESCRIPTION: Matrices, linear systems of equations. Linear programming, least-squares approximations, determinants, eigenvalues and eigenvectors, matrix inversion, elimination, iteration and other algorithms, precision and error analysis of computational cost of algorithms. Emphasizes the practical methods using computer algorithms. Credit not awarded for both MATH 330 (Linear Algebra) and MATH 365. 3 credits.

PREREQUISITES for the COURSE: Math 182 and CS 117 or CS 135.

COURSE MATERIALS:
Suggested Text: Student's Solution Manual
Scientific Calculator, writing and compiling in C++

COURSE OBJECTIVES: We will begin with Chapter 1 of the required text, and proceed through the chapters in the book, giving preference to those topics mentioned in the course description. We will attempt to cover all topics covered throughout the text. Students will be able to determine and verify solutions to topics presented in the course description.

EVALUATION AND GRADE ASSIGNMENT:
5% Riddle Average
15% Quiz Average
20% Programming Average
10% Test 1
10% Test 2
10% Test 3
30% Cumulative Final Exam (Given Tuesday, May 13th 1:00 – 3:00pm)
Letter grades will be assigned according to the University scale

COURSE SCHEDULE: See schedule or web page for latest version
CLASS POLICIES:

RIDDLE AVERAGE:
- Riddles will be given the first few minutes of every class that is not a test day.
- Riddles can be solved in a group (no more than 3 per group), or you can choose to work individually.
- All riddles will be graded on the following scale (10 point maximum):
  - 3 points for being prepared to work (on time, in seat, books out, phones off, etc.)
  - 5 points for trying (which means anything written down to indicate critical thinking and forward progress)
  - 2 points for correct solution.
- Riddles cannot be made up if you are absent or late. You will be allowed two zeros that will not count towards your average.

ATTENDANCE: Attendance is tracked through grading of riddles. Otherwise, it will not count directly in the computation of your grade. However, much of the material in the course cannot be made up (see the make-up policy), thus affecting your grade if you are late or absent.

MAKE-UP POLICY: If you miss a class for any reason, you are responsible for all material covered, announcements made in your absence, and acquiring materials that may have been distributed in class. Tests can be made up in an emergency before they are returned to the class, but only if given prior consent, of which written documentation is required. All other make up work will not be accepted and will result in a recorded grade of zero.

COLLABORATING: I highly encourage you to collaborate with your peers, however there is a distinction between verbal collaboration and copying. Specifically – it is not acceptable to “divide” work, and it is not acceptable to use another persons’ hard work (current or former student, TA, or tutor) and pass it off as your own. Further, if you feel you are being misguided, it is your responsibility to report this to me before testing, so I can correct the situation and give you proper clarification.

UNIVERSITY POLICIES: (1) Academic dishonesty will not be tolerated. All acts of academic dishonesty may result in: automatic zero on the assignment, F in the course, disciplinary review, revoking of degree, probation, expulsion, etc. (2) If you have a documented disability that may require assistance, you will need to contact Disability Services (895-0866, SSC Room 137) for coordination in your academic accommodations. (3) You are individually and solely responsible for violations of copyright and fair use laws. (4) Absences due to religious holy days are excused, however you must notify faculty of anticipated absences by the last day of late registration. Please review the UNLV Student Code of Conduct and Selected Policies online (www.unlv.edu/studentlife/judicial/) or in the catalog.

GUIDELINES FOR COURTESY AND RESPECT: I would like to welcome all students into an environment that creates a sense of community pride, courtesy, and respect; we are here to work cooperatively and to learn together.

In order to create a smooth and harmonious learning community, please make every attempt to come to all class sessions, to come to class on time, and to stay until the end of the meeting unless you have informed me that you must leave early. There may be a time when you are unavoidably late for class. In that case, please come into the room quietly and choose a seat closest to the entrance. Once the class session has begun, please do not leave the room and then re-enter unless it is an emergency.

It is important that we are all able to stay focused on the class lecture/discussion. For this reason, only one person at a time in the class should be speaking. Side conversations are distracting for surrounding students and for the instructor. All electronic devices should be turned off BEFORE entering the room.

As you can see, simple norms of courtesy should be sufficient to have our class run in the best interests of all. Thank you in advance for your cooperation.