CS2104: Introduction to Problem Solving

Class: (1) See web site

Instructor: (1) Dr. Alexey V. Onufriev, 2160C Torgersen Hall
Email: alexey@cs.vt.edu
Office Hours: see class web site

Teaching Assistants: See the web site

Textbooks (recommended): Problem Solving and Comprehension, Sixth Edition
by Arthur Whimbey and Jack Lochhead
The Art and Craft of Problem Solving
by Paul Zeitz

Other Sources: Effective Problem Solving, Second Edition
by Marvin Levine

Course Notes: See the web site

Prerequisites: ENGE 1024
MATH 1205 or MATH 1526

Honor Code. The Honor Code (and in particular, the Computer Science Departmental Honor Code) applies to this course and will be strictly enforced. All homework submissions that involve working problems MUST contain the following Pledge Statement:

I have not received unauthorized aid on this assignment. I understand the answers that I have submitted. The answers submitted have not been directly copied from another source, but instead are written in my own words.

Assignments and Grading Policy. The course will be graded on the basis of approximately 800 to 1000 total assigned points. There will be in-class assignments and exercises, including quizzes. Approximately 1/3 of the
course grade will be based on in-class assignments including quizzes and the final exam. The exam (worth about 240 points) will be open book. You will have much more than the "bare minimum" time for this exam. Approximately 1/3 of the course grade will be based on weekly homework or programming assignments. And the remaining 1/3 or so will come from the group project assignments. The above breakdown is very approximate. There letter grading is very simple. There is no "curving" in this course: your points, on the 100 point scale, are $100 \times \left( \frac{\text{total assigned points}}{\text{maximum possible}} \right)$.

90 and above will bring you an "A", 85 and above "A-", 80 and above "B+", and so forth in the decrements of 5.

In addition, there may be a few special problems given for extra credit during the semester. The extra credit will help decide "marginal" cases.

Solutions to homework assignments will be submitted via Scholar, in PDF format only; due dates are posted on the main class website. Due dates and any other info on the main site supercedes any info on Scholar. (See the course web site for a link to Scholar.) Note that presentation (i.e., readability and clarity) will count in grading.

Assignments are normally due to Scholar at 11:00pm on a given day, unless otherwise stated on the class website. No late assignments will be accepted unless you have an acceptable excuse (e.g. documented illness). Network glitches, home power outages, etc. are NOT acceptable excuses for late submission unless this is a statewide event that lasted for longer than 6 hours around the deadline time or you can provide documentation from VT campus network service that the outage lasted for longer than 6 hours around the deadline time.

You have ONE school week (breaks excluded) to appeal your scores after each assignment was graded.

**Problem Solving as part of a group.** Some assignments require groups of 3 or more students, some require pairs, some are individual, and some are optional pairs. When students turn in a joint assignment, all students in the group will normally receive the same grade. You may not switch partners in the middle of an assignment. In other words, you may not discuss solutions for any one assignment unless you are working on a group assignment. Then you are NOT allowed to discuss the assignment with members of other groups.

When students work in groups, it is important that all the students in-
volved completely understand the answers that they submit. The instructor reserves the right to require any student to present the answers to their homework assignment verbally to insure that each student does in fact meet the minimum requirement of understanding the solutions they submitted, and may reduce credit given for the assignment if the verbal answer is not compatible with understanding of the written answer. All joint submissions MUST contain a statement that clearly indicates, for EACH problem, the contribution of EACH student to the problem. Some possible contributions for a problem might include one or more of the following: Cracked the problem, wrote up the solution, found flaws/improved earlier versions of the solution.

You have ONE school week to appeal possible missing points from an in-class group problem solving exercise. Group leaders are responsible for reporting the points for the entire group. It is, however, responsibility of each student to make sure that his/her points are entered correctly.

**Special Accommodations.** If any student needs special accommodations because of a disability, please contact the instructor during the first week of class.

**Electronic Information.** Information such as copies of the syllabus and assignments, assignment solutions, and class grades, will be made available through the class web site. Notice of homework deadlines, test dates, etc., will be posted at the course web site. The course instructor accepts no responsibility or obligation for making such announcements in class. The course web site is the official source for all course notifications.