Course: PROGRAMMING METHODOLOGY (CSc 340)

Instructor: Dr. Jozo Dujmović (English spelling/pronunciation: Yozo Dooy-mo-vich)
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Office hours: MWF MWF 3-4 pm (W 5-6 pm if CS Dept. has faculty meetings)

Prerequisites: Grades of C or better in CSC 213 or 220 (Data Structures); and CSC 230 (Discrete Math) or 330.


Recommended literature:
4. W. Savitch, Problem solving with C++. Addison Wesley, 2005

On-line: iLearn (http://iLearn.sfsu.edu/) – all communication with the class and distribution of materials is based on iLearn.

Compilers: Dev C++ (Currently V 4.9.9.2; downloadable from http://www.bloodshed.net)
Microsoft Visual C++ (SFSU students can download a copy from the MSDN academic library)
For Linux/Unix users: command line compiler g++, and a text editor (usually vi)

Contents:
Languages. Our primary goal is to study programming methodology using the programming language C++. Since C++ is a superset of C (which is also a very important industry language), in addition to detailed study of C++ we will also offer a survey of C programming.

Programming methodology. The main topics in programming methodology will cover coding of data, procedural programming, nonprocedural programming with emphasis on recursive programs, and object-oriented programming in C++. Software reusability and the use of STL. We will also study program performance topics.

Algorithms. In parallel with the study of languages and programming methodology, we will present various important nonnumeric and numeric algorithms. In the area of nonnumeric algorithms our primary source will be the selected textbook (Carrano). However, we will also use other sources.

Final Exam The final exam will be scheduled according to the University Calendar.

Attendance The attendance in classes is mandatory and will be periodically checked by taking the class roll.

Notes Take notes in the class. Class notes are extremely important for preparing for exams.

Effort Approximately 1-2 hours of work every day during the semester.

Grading: The total of 100 points is distributed as follows: programming assignments (20), midterm exam (30), and final exam (50). The total number of attained points is used for relative ranking of students. Letter grades are assigned taking into account three components: (1) the total score, (2) the relative ranking, and (3) the attendance of lectures and the class/iLearn activity.

DPRC: Students with disabilities who need reasonable accommodations are encouraged to contact the instructor. The Disability Programs and Resource Center (DPRC) is available to facilitate the reasonable accommodations process. The DPRC is located in the Student Service Building and can be reached by telephone (voice/TTY 415-338-2472) or by email (dprc@sfsu.edu).