CSI 202 – Computer Science II – Spring 2009

Instructor: Dr. Shaun D. Ramsey Email: shaun.ramsey@gmail.com Phone: (410) 810-7485 Office: Dunning Decker N102 Office Hours: MW 11:30-12:30, T 11:00-12:00 Class meetings: MWF 10:30-11:20 - TOLL S111 Primary Text: C++ Plus Data Structures, 4th Edition by Nell Dale Secondary Text: Introduction to C++ Programming, Comprehensive (Hardcover) by Y. Daniel Liang Web: http://ramsey.washcoll.edu/

Overview: The purpose of this course is to delve even deeper into problem solving and logic using programming and the C++ programming language. We will be focusing on pointers, structs, classes, trees, and other high level data structures used to solve complex problems.

Topics: This course covers pointers, algorithm analysis, STL, stacks, queues, trees, and balanced trees. We will also cover data abstraction, classes, and inheritance. Several types of sorts will be examined and analyzed. In addition, several types of balanced trees will be thoroughly investigated.

Advising: This course assumes strong basic knowledge of programming and problem solving using the C++ programming language in particular. Light knowledge of the linux operating system is necessary to navigate, compile, save work, compile work, and to otherwise manage your projects. Further information and assistance is available on these topics upon request and from the website above.

With that said, it should be stressed that strong logic and problem solving skills are required to be successful in this course. CSI 201 is a prerequisite of CSI 202. CSI 201 is the first course in the major sequence for computer science and is required in several other disciplines.Likewise, CSI 202 is the second course in the major sequence. The course counts as a quantitative distribution.

Grading: Your grade consists of three exams, one final exam, and assignments. You must pass each exam and have a passing average on assignments to pass the course. Each exam is worth 20% of your final grade. Course-

work/homework comprises the last 20% of your final grade. Attendance can have an affect on your final grade (see below).

Assignments and Programming: Assignments largely consist of programs completed outside of class, but may include other assigned tasks inside and outside of class. For example, quizzes, oral presentations during class and specific written assignments outside of class. For programming assignments, credit is given only for programs which compile without errors, execute properly, and are not late. Late homework will receive a grade of 0, but will be collected for mark-up. Assignments are due at the beginning of class on the assigned due date. Programming assignments are time stamped by the server we will be using, so be sure not to alter your program after the hand-in time.

Exams: Tentatively, exams will be held on M 2/9, W 3/18 and W 4/15. The final exam will be administered during its scheduled slot during final exam week. An absence on the day of an exam will result in a grade of a 0. Except in cases of extreme emergency, exams must be taken on the day the exam is administered. Before a make-up test is scheduled, documentation of the extreme emergency must be given. Make-up exams for tests missed due to an extreme emergency will be arranged for a time that is mutually convenient for the student and Dr. Ramsey.

Attendance: You may miss four class meetings before a missed lecture begins to impact your final grade. Each missed class meeting after the fourth (for any reason) results in the reduction of your final grade by half a letter grade (or 5%). It is your responsibility to obtain assigned homework, announcements and class notes from your fellow students. Talk to classmates for class notes. It is important that you attend every class, as there is certainly a correlation between grades and attendance. As a matter of courtesy, students are expected to inform Dr. Ramsey of the reason for any absence.

Academic Honesty: You are always subject to the Honor Code of Washington College. You may discuss concepts with others, but work is to be done on your own (unless otherwise designated). If you are unsure if something is considered *cheating*, simply ask. As always, if you have questions, feel free to email or stop by my office. SHARING CODE OR GIVING CODE IN ANY WAY IS CHEATING! Accommodations: If you have a special accommodation/need that has been reported to the college, please let me know discretely during the first week, so that I can work to meet your accommodation.

Suggestions: To become a good programmer and problem solver, you must work on many problems. If you need help, please see me, peers or the math center for assistance. There are many resources, so there is no excuse for not using them. Be sure that you have solid fundamentals. If there is a concept from the prerequisites, then go back and review them for yourself. Understanding early concepts in a fundamental and concrete way will strengthen your grasp on new material, allow you to work more efficiently, and may also give you further insights into computer science in general. The website will also be your source for topics covered, new assignments, and helpful tutorials, so be sure to utilize that course resource.