CSI 380 — Organization of Programming Languages

Instructor: Dr. Shaun D. Ramsey **Email:** sramsey2@washcoll.edu
Phone: (410) 810-7485 **Office:** Goldstein 213

Office Hours: MW 10:30am–11:20am
Tu 11:30-12:45pm or by appointment
Class meetings: SMTH 226 TuTh 10:00AM-11:15AM
Text: *Programming Languages: Design and Implementation, Fourth Edition*, by Pratt and Zelkowitz

Overview: A programmer may be exposed to a variety of languages throughout her career. For example, in the last fifteen years, Pascal has become obsolete while Java, Perl and C++ have become standardized and well used. Studying programming languages may allow one to develop more efficient algorithms, improve current programming skills, and improve one's knowledge of useful paradigms and constructs. Choosing the appropriate languagefor a task is askin to choosing the right tool for a job. Don't use a hammer when you need a screwdriver! Obviously, understanding programming languages makes it easier to design and learn new languages and new language features.

Topics: You will learn about the evolution of software and architecture, the role of programming languages, computer operation, language translation, lambda calculus, and data handling. Sequence control and storage management are also topics of interest. How languages handle encapsulation, inheritance and polymorphism is also of great importance in programming languages.

Advising: CSI 380 is a required course for the major in computer science. CSI 240 is a prereq for this course.

Exams: The exams will be held on March 9th and April 27th. 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.

Grading: Your grade consists of two exams, one final, homework, classwork, and oral presentations. You must pass each of these five sections to pass the course. Each exam is worth 20% of your final grade. The final exam is 25%. Homework contributes 10% of your final grade. Classwork comprises 15% of your grade in this course. Classwork will contain programs completed during class as well as weekly quizzes based on previous material and reading material. Oral presentations cover the last 10% of your grade. For programming assignments, credit is given only for programs which compile without errors, execute properly, and are not late. Late homework will not be accepted. Homework is due at the beginning of class on the assigned due date and in many cases is time stamped by the server we will be using.

Attendance: Attendance will be taken at the beginning of every class. After two weeks of missed absences you fail the course. You fail the course on your fifth absence in a TTh course and on your seventh absence in a MWF course. There is no distinction between excused and unexcused absences. I will likely email you if you miss a class, but it is ultimately your duty to keep track of your absences. Note that missing a class may also result in missed classwork or quizzes. There are no make-up quizzes. It is your responsibility to obtain assigned homework, announcements and class notes from that class. It is important that you attend every class. As a matter of courtesy, students are expected to inform Dr. Ramsey before class describing 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.

Accommodations: If you have a special accommodation/need that has been reported to the college, please let me know discretely as soon as possible, so that I can work to meet your accommodation.

Suggestions: Talk to others and work in groups on concepts! 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.