

BU CAS CS 520: Principles of Programming Languages

(Syllabus)

- **Semester** Fall 2010
- **Instructor:** Hongwei Xi
- **Lecture Times:** TR 11:00-12:30PM
- **Office Hours:** TR: 12:30-1:30PM; W: 2:00-3:00; or by appointment
- **Classroom:** MCS B31 @ 111 Cummington Street
- **Reference Books:**
 - *Practical Foundations for Programming Languages (draft)* by Robert Harper
 - *Types and Programming Languages* by Benjamin C. Pierce. ISBN 0-262-16209-1. MIT Press.
 - *ATS/Anairiats User's Guide (draft)* by Hongwei Xi
- **Homepage:** <http://www.cs.bu.edu/~hwxi/academic/courses/Fall10/CS520.html>
- **Overview:** *Principles of Programming Languages* is a course that introduces students to some fundamental principles and techniques in modern programming language design and implementation. The course mainly covers functional and imperative programming and emphasizes the need for mathematical formalism in both describing and analyzing programming languages. In addition, the course makes use of a recently developed programming language ATS, allowing students to gain first-handed experience with employing advanced types in practical programming.
- **Class Schedule** Please find on the class homepage a detailed class schedule by each week.
- **Grades** The final score is calculated using the following formula.

$$\text{final score} = 40\% \cdot (\text{homework}) + 20\% \cdot (\text{midterm}) + 40\% \cdot (\text{final})$$

The final letter grade is calculated as follows.

- **A:** final score is 80% or above
 - **B:** final score is 70% or above
 - **C:** final score is 60% or above
 - **D:** final score is 50% or above
- **Academic Integrity:** We adhere strictly to the standard BU guidelines for academic integrity. For this course, it is perfectly acceptable for you to discuss the general concepts and principles behind an assignment with other students. However, it is not proper, without prior authorization of the instructor, to arrive at collective solutions. In such a case, each student is expected to develop, write up and hand in an individual solution and, in doing so, gain a sufficient understanding of the problem so as to be able to explain it adequately to the instructor. Under *no* circumstances should a student copy, partly or wholly, the completed solution of another student.