

COMP 524: Programming Language Concepts

—Spring 2010—

At a Glance

Class Room: FB007 (Brooks Computer Science Building)
Meeting Times: Tuesday/Thursday 3:30pm–4:45pm
Homepage: <http://www.cs.unc.edu/Courses/comp524-s10/>

Midterm Exam: Tuesday, March 2nd, 2010, in class.
Final Exam: Wednesday, May 5th, 2010, 4:00pm.

Instructor: Björn Brandenburg
Office: FB132
Email: bbb@cs.unc.edu
Telephone: 919-962-1704
Office Hours: Tuesday, 12:00pm–1:00pm, SN006 (regular office hours)
Wednesday, 4:00pm–6:00pm, FB008 (walk-in homework help)

Course Objective

The primary goal is to learn how to systematically understand programming languages.

Upon completion of this course, students should **(i)** recognize and understand the recurring concepts and abstractions found in modern high-level programming languages, **(ii)** have a working knowledge of syntax specification and parsing, and **(iii)** know and understand the differences between the major language paradigms (object-oriented, functional, *etc.*) and implementation approaches (interpreter, compiler, virtual machine, *etc.*).

COMP 524 satisfies the B.Sc. in Computer Science *Programming Languages Group* requirement (see [degree requirements](#)). Students with a strong interest in programming language implementation should consider enrolling in COMP 520 (Compilers) in addition to this course. Students predominantly interested in applying programming languages should contemplate choosing COMP 523 (Software Engineering) as an alternative.

Prerequisites

The official (hard) prerequisite is **COMP 410 (Data Structures)**. Additionally, students are expected to be **proficient in Java** and comfortable with programming in general. *Contact me before enrolling if you do not meet these requirements.*

Further, students will benefit from having completed COMP 411 (Computer Organization) and COMP 455 (Models of Languages and Computation) prior to enrolling in COMP 524. However, COMP 411 and 455 are not prerequisites as the relevant background from these courses will (briefly) summarized in class.

Textbook

Programming Language Pragmatics, third edition, Michael L. Scott, 2009. Morgan Kaufmann Publishers, ISBN 978-0-12-374514-9.

Supplemental reading material will be made available on the course homepage.

Homework Policy

Homework and reading assignments will be posted on the course homepage. The due date and time will be clearly stated on each homework assignment. No late submissions will be accepted without prior approval from the instructor.

Classroom Policy

You are expected to maintain proper etiquette in class. This includes:

- not making a habit of arriving late, or leaving in the midst of class,
- not talking, texting, sleeping, reading newspapers, eating, *etc.* in class,
- keeping cellphones, pagers, *etc.* off.

This class will be far more enjoyable for everyone if all students come to class ready and willing to discuss the material to be covered. I plan to reward those who participate in class by increasing their final grade by up to half a letter grade. I also reserve the right to add a similar negative “reward” for those who do not observe appropriate etiquette in class.

Laptop Policy

Laptop use in class is **strongly discouraged**. Laptops may be used to take notes, but please consider taking notes on paper instead. Do NOT browse the web, read news, write email, chat, access Facebook, Twitter, *etc.* under any circumstances.

If you need to look up a term then make a note and do it after class, or ask the instructor.

Honor Code Policy

Plagiarism and cheating, in any form, are not acceptable. Violations will be reported to the Student Attorney General.

Students are responsible for familiarizing themselves with and obeying the CS-specific rules as detailed in the guide [“Honor Code Observation in Computer Science Courses.”](#)

Grading

The final grade will be composed as follows:

Homework:	40%
Final:	30%
Midterm:	20%
Quizzes:	10%

There will be 3-6 *short and easy* quizzes at the beginning of class (possibly unannounced). The purpose of these quizzes is to check whether students are keeping up and understanding the material.

When determining the final grade, the lowest quiz score and the lowest homework score will be dropped, and in-class participation will be taken into account as described above.