COMP Majors:
Learn Production Programming
in COMP 312 (MWF 2)

Comp 312 builds on the Rice core curriclum in OO Design by engaging students in development of DrJava, an open source Java programming environment in widespread use at many universities around the world including Rice.

The course focuses on teaching the principles and practices of *test-driven software development*, which have been popularized under the banner of "Extreme Programming". This year the course will emphasize design patterns for controlling concurrency and refactoring transformations to improve legacy code such as the existing DrJava code base.

Workload and Grading Students are expected to spend 10-12 hours per week (including lectures) on the course, primarily working in teams on software projects. Students are graded based on their effectiveness as software developers. The software development teams are managed by teaching assistants who have had extensive software development experience working on the DrJava project.

Ancillary Skills In the process of taking this course, you will learn how to manage the code base for a large production program (over 100,000 lines of source code) using tools like `ant`, `JUnit`, `clover`, `findbugs`, and `sourceforge`.

Recommended Textbooks
- Joshua Kerievsky. *Refactoring to Patterns*, 2004.
- Ron Jeffries *et al. Extreme Programming Installed*, 2001.
- Doug Lea. *Concurrent Programming in Java: Design Principles and Patterns (2nd Edition)*. Addison-Wesley, 1999.

For more information, contact Professor Robert "Corky" Cartwright (DH 3104, x6043, `cork@rice.edu`) or read the paper "Production Programming in the Classroom" at `http://drjava.sourceforge.net/publications.shtml`.