**Course:** COMP 311/544
**Term:** Fall 2019
**Lecture Room:** DCH 1075
**Lectures:** Tu/Th 4:00–5:15pm

## Course Title

FUNCTIONAL PROGRAMMING IN SCALA

## Instructor Contact Information


**Instructor:** Nick Vrvilo
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**Instructor:** Robert "Corky" Cartwright
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## Course Objectives and Learning Outcomes

This class provides an introduction to concepts, principles, and approaches of functional programming. Functional programming is a style of programming where the key means of computation is the application of functions to arguments (which themselves might be functions). This style of programming has a long history in computer science, beginning with the formulation of the Lambda Calculus as a foundation for mathematics and computer science. It has become increasingly popular in recent years because it offers important advantages in designing, maintaining, and reasoning about programs in many modern contexts such as web services, multicore programming, and cluster computing. Course work consists of a series of programming assignments in the Scala programming language, focusing on the core functional constructs and data structures.

## Required Texts and Materials

There are no required textbooks for the class. We will provide links to optional reference material on the course website and in lecture handouts and slides.

## Grade Policies

Grading will be based on your performance on biweekly programming assignments and two exams (a midterm and a final). Late submissions will not be accepted.

## Absence Policies

If a student misses a lecture, they are expected to review the lecture material on their own.

## Rice Honor Code

In this course, all students will be held to the standards of the Rice Honor Code, a code that you pledged to honor when you matriculated at this institution. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at http://honor.rice.edu/honor-system-handbook/. This handbook outlines the University's expectations for the integrity of your academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process.

**Homework and Exam Submissions:** All submitted homework and exam submissions are expected to be the result of your own personal effort. You are free to discuss course material and approaches to problems with your other classmates, the teaching assistants and the professor, but you should never misrepresent someone else's work as your own. If you use any material from external sources, you must provide proper attribution. You should not share your solutions or make them publicly available.

## Disability Support Services

If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Support Services (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

## Syllabus Change Policy & Course Web Site

This syllabus is only a guide for the course and is subject to change with advanced notice. The latest syllabus information for the course will always be available at the course website.

This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza.

Find our class page at https://wiki.rice.edu/confluence/display/FPSCALA/2019-Fall