

# The Beauty and Joy of Computing

CSC 110: Computer Science Principles

*A new Interdisciplinary Perspectives course:*



Learn how computing

- Powers discovery and innovation
- Is changing the world

Prototype your own new designs

Tues/Thurs 10:15-11:30  
Riddick 325

## Professors

Dr. Tiffany Barnes  
Dr. Thomas Price

## • Programming in

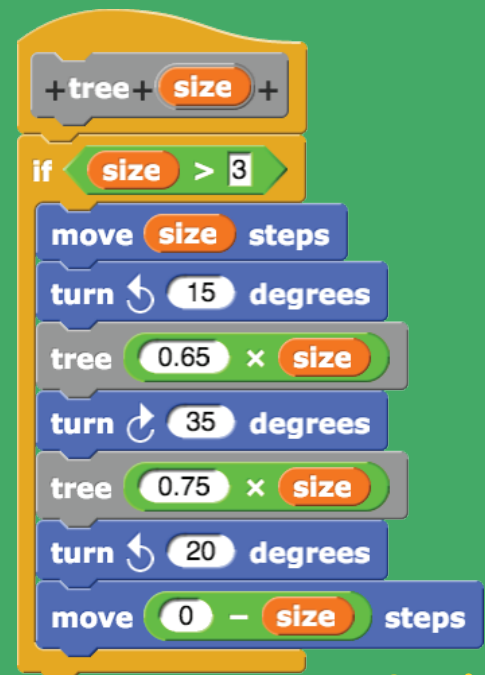
- Snap! supports recursion, higher order functions, and OOP. Program in the browser; no installation required.

(Inspired by Scratch, from the MIT Media Lab.)

## • Social implications and context

## • Topics

- Abstraction, graphics, applications, programming paradigms, concurrency, algorithms, games, recursion, privacy, copyright, game theory, artificial intelligence, limitations of computing, and the future of computing



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# CSC 110: Computer Science Principles

## The **Beauty** and **Joy** of **Computing**

Tuesday & Thursday  
10:15 - 11:30 AM  
325 Riddick Hall

Dr Tiffany Barnes  
Dr. Thomas Price

### **Course Description:**

This course explores the principles of computer science while emphasizing the relevance of computing to students and to society. Students will learn about beautiful computing applications that have changed the world and how computing empowers discovery and innovation. Students will **learn the joy of programming** a computer using a friendly, graphical language, capable of **creating apps, simulations, and games**. Students who complete the course will be able to **solve meaningful problems with computers**, apply design processes to take an idea from concept to implementation, develop a computer program, and analyze computing artifacts from both design and computing perspectives. Students will complete a **substantial team programming project** related to their interests.