

## **CS106 Introduction to Computer Science**

**Instructor:** Tom O'Connell

**Web Site:** [www.skidmore.edu/~toconnel/cs106](http://www.skidmore.edu/~toconnel/cs106)

**Textbook:** *An Animated Introduction To Computer Science With Processing And Java*, by Thomas C. O'Connell, [cs1.guidehand.com](http://cs1.guidehand.com), 2016.

### **Description:**

An introduction to computer science. Students will develop simple 2D games, animations and simulations using the Java programming language and Processing, a Java package designed to make programming accessible to visual artists. The course covers the fundamental techniques of computer programming, software design, and algorithm development.

### **Student Learning Goals:**

Students will learn the basic concepts of computer science and computer programming. By the end of the course, students will be able to design and develop simple software applications that include a substantial visual component.

### **Assessment:**

Students will be assessed based on programming assignments, labs, and exams. The exams will assess whether students have developed an understanding of the concepts discussed in class. The programming assignments and labs will assess whether students can put those concepts into practice.

### **Grading:**

The following are general guidelines. Effort and class participation can improve your grade.

- Homework: 50%
- Midterm Exam: 20%
- Final Exam: 30%

## Homework:

The homework will consist of three or four programming assignments.

- Work alone: I expect all work to be your own. It is OK to talk with other people in the class about the course topics and to help each other to understand what is happening with your programs, but you should NEVER take a piece of code that someone else wrote or let someone else type something into your program. **If you talk with others about a program, you should note with whom you discussed the program at the beginning of your submission.**

I have seen many students get way too much help on their programs. These students get blown away in CS206 because they learn nothing in CS106. If you are having trouble with a program, come talk to me or email the program to me, and I will help you figure out what is going on.

The homework assignments will be evaluated based on several criteria including:

- Correctness: Does the program solve the stated problem?
- Readability: Is the program organized in a way that makes it easy for someone unfamiliar with the program to read and understand the program?
- Adherence to technical guidelines: Does the program solve the stated problem using the techniques required by the homework assignment?

These criteria will make much more sense to you after we have developed programs together in the first week of class.

A couple of hints on the homework assignments

- Start early: Programming can be extremely time consuming. Programming under time pressure can be even more time consuming.
- Testing: Make sure you test your program thoroughly – I will.

## Labs:

I typically do not grade work we do in lab, but the lab assignments usually become part of later homework assignments.

**Students with disabilities:**

Please bring me your semester memo of accommodations as soon as you obtain it. If you think that you need accommodations but do not yet have them, set up a meeting with the Coordinator for Students with Disabilities in the Office of Student Academic Services in Starbuck Center.

**Title IX Statement**

Skidmore College considers sexual and gender-based misconduct to be one of the most serious violations of the values and standards of the College. Unwelcome sexual contact of any form is a violation of students' personal integrity and their right to a safe environment and therefore violates Skidmore's values. Sexual and gender-based misconduct is also prohibited by federal regulations. Skidmore College faculty are committed to supporting our students and upholding gender equity laws as outlined by Title IX. If a student chooses to confide in a member of Skidmore's faculty or staff regarding an issue of sexual or gender-based misconduct, that faculty or staff member is *required* to tell Skidmore's Title IX Deputy Coordinator. The Title IX Deputy Coordinator will assist the student in connecting with all possible resources for support and reporting both on and off campus. Identities and details will be shared only with those who need to know to support the student and to address the situation through the college's processes. If the student wishes to confide in a confidential resource, The Counseling Center Staff, Health Services, and Victim Advocates are all options available.

More information can be found at <https://www.skidmore.edu/sgbm/> or by contacting the Title IX Deputy Coordinator.