SYRACUSE UNIVERSITY

CPS 185
Animation & Game Development
2020-2021
(3 credits)

Faculty: Ehat Ercanli, Associate Professor, Department of Computer Science
Administrative Contact: Avinash Kadaji, Associate Director of Information Systems, Project Advance

This three-credit course offers a highly visual, non-mathematical introduction to computing and computer programming. Our vehicle is the Alice development environment, which allows students without prior experience to rapidly create 3D virtual worlds like those seen in video games. Students will choose environments, populate them with features, creatures and sounds, and animate these elements in simulated three-dimensional space to tell stories, play games, give interactive instructions, etc.

Students work in a small team creating virtual worlds for assignments and a final project, learning the principles of computer programming in the process. You will see the results of your efforts immediately. We aim to improve your skills in exact thinking, analysis/design, and problem-solving, while providing an enjoyable path to more formal study of computing and programming.

Topics covered include:
- Elementary universal computing concepts
- Alice/3D animation basics
- Variables/types/expressions/functions
- Conditional execution
- Iteration (looping) constructs
- Methods
- Events and user interfaces
- Structured data: Lists and arrays
- Recursion
- Programming concepts in general (particularly, object-oriented programming)
- Graphics/animation in general (time permitting)

Title/Author (Publisher)	Price Per Copy	Ordering Source
Alice 3 in Action: Computing Through Animation, Joel Adams ISBN: 9781133589228	$161.95	Cengage Learning Phone: 800-354-9706

Prices are subject to change.