

**Instructor:** Jason Witherell  
Office: ATC325  
Office Hours: M-Th 8:15am – 9am, W 2:30-3:30pm, or by appointment  
Contact Info: [jwitherell@shawnee.edu](mailto:jwitherell@shawnee.edu) 740-351-3113 (voicemail is broken...)  
Web Pages: [www.ssugames.org](http://www.ssugames.org) (course content: labs, lectures, example code, etc.)  
[blackboard.shawnee.edu](http://blackboard.shawnee.edu) (lab submission and course grades)

**Text Book (optional):**

Title: **Python Programming for the Absolute Beginner, 3rd edition**

Author: Michael Dawson ISBN: 1-4354-550-2

*This is a good intro to Python and game programming, especially if you're new to programming. You don't have to purchase the book, but it might be nice to have if you get stuck in lecture and need a different description than those I give in class. This book covers a lot of what we'll cover in ETGG1801. It's readable and is mostly tutorial-based. It isn't however, a very good reference (that's what Google's for<sup>2</sup>). And it's cheap!*

<https://docs.python.org/3/>

*This is the python reference. The "Tutorial" section is a good place to start. Once you're more seasoned, the "Library Reference" section contains all the built-in goodies that come with python (e.g. networking, cryptography, xml, etc. support).*

**Catalog Description:**

[This course is an] introduction to the rigorous field of interactive simulation and gaming. [Students will] learn about the major components of modern simulations and game from both a design perspective and a technical perspective. Topics include fundamentals of simulation/gaming, user interface design, human computer interaction, input/output paradigms, and an overview of simulation/games design process. Lab activities are designed to foster critical thinking and problem-solving skills through the development of an understanding of the development process as well as interactive programming techniques through the creation of working interactive programs in a high-level programming language.

**Student Learning Outcomes** (with relative weight given in the course).

Upon completion of this course, students should be able to...

1. (15%) Understand the basic foundations of Computer Science.
2. (15%) Debug broken (Python) programs (including those written by others)
3. (50%) Analyze simple problems and formulate an appropriate and well-designed algorithmic solution and implement those algorithms in Python
4. (20%) Programmatically create 2d simulations which include graphics, animations, and user input.

**Grading System:**

Assignments will be weighted as follows:

- 60% Labs (some in-class, mostly work-at-home)
- 25% Quizzes (pop quizzes are possible, but mostly announced)
- 15% Cumulative Final Examination

**Attendance:** I will take attendance each day (initially to connect names and faces). Attendance won't, however, *directly* affect your grade. You are adults – you can decide if coming to class is worth your time or not. You are responsible for *everything* you missed including dates (of quizzes and lab assignments), all materials on the board, etc.

**Lab Assignments:** This is your chance to explore the ideas discussed in lecture. Some labs will be short exercises (meant to be done in class). Each module of the course will include a longer lab. We'll have lab time in class periodically – that's your best chance to ask questions and get help on areas that are giving you trouble. You'll get the most out of this time if you start labs immediately and ask questions regularly.

I want all labs to be done individually. You can ask others *general* questions, but if you in any way share code (by looking at it, electronically transferring it, or verbally asking someone what they typed) and I notice similarities between your submission and another student, I will handle it as follows:

- First minor offence: A warning will be given on your written feedback for a lab (on blackboard)
- Second minor offence or first major: All parties involved will split the points (or get a 0) depending on severity...
- Third minor offence or second major: Referral to the Dean of Students (Academic Misconduct violation)

**Exams and Quizzes:** Each module will end with a quiz (normally, but not always after the lab is returned to you). This quiz will focus on just that module's contents (but...programming is inherently cumulative). At the end of the semester there will be a comprehensive final examination.

All quizzes and exams are closed-notes, closed-book, closed-computer. On the final exam, I might allow a "cheat sheet" (we'll discuss this as the final gets nearer)

No makeup tests / quizzes will be given unless you get prior approval from the instructor or have a documented emergency (e.g. discharge note from the ER, documentation of a funeral, etc.)

#### **Tentative Modules:**

1. Intro to Python, variables, built-in and programmer-created functions [text-based "stuff"]
2. More detailed expressions
3. Importing modules, pygame intro
4. If / While in python
5. Game loops
6. Sequences [Groups of "things"]
7. Functions
8. Object-oriented Programming
9. Trigonometry and applications [e.g. Atari2600 "Tank"-style movement]
10. Inheritance in OOP (time permitting)
11. File I/O and applications (time permitting)
12. Group Project – a prelude to ETGG1802 (time permitting)

#### **Tutoring:**

The main sources of help besides Jason are the SI (Student Instructor) and individual tutors. The SI('s) this year are \_\_\_\_\_.

The SI will attend a class (maybe not ours) and do lab assignments with you. They should understand the material very well. The SI will also host out-of-class tutoring times (usually when class isn't in session and when the instructor isn't available). No reservations are required – open lab time is meant for "walk-in's". The open lab times will be posted (on ATC204's whiteboard) and announced soon after the semester starts.

Tutoring is also available on a one-on-one basis. To take advantage of this, you must register in the Student Success Center (Massie Hall) or online (?). Based on demand and availability of upper-class tutors, every attempt will be made to find you a tutor.

### ADA statement:

Any student who believes s/he may need an accommodation based on the impact of a documented disability should first contact a Coordinator in the Office of Disability Services, Student Success Center, Massie Hall, 740-351-3276 to schedule a meeting to identify potential reasonable accommodation(s). Students are strongly encouraged to initiate the accommodation process in the early part of the semester or as soon as the need is recognized. After meeting with the Coordinator, students are then required to meet with their instructors to discuss the student's specific needs related to their disability. If a student does not make a timely request for disability accommodations and/or fails to meet with the Coordinator of Disability Services and the instructor, a reasonable accommodation might not be able to be provided.

### A few more Resources if you need help:

- Lindsay Monihen (MAS 132), CPS Advisor: academic crises, financial aid questions, transferring, etc.
- Dean of Students Office (UC 222): resolution of academic and non-academic resources.
- Student Obdudsperson, Linda Hunt (ADM 140): help with appeals, complaints

**Important Dates:** Note the student business center is generally open 9am – 4pm

- 8/21/2017 (M): classes begin
- 8/25/2017 (F): Last day to add a class on MySSU
- 9/1/2017 (F): Last day to add a class (with instructor *and* Dean approval)
- **9/4/2017 (M): Labor Day (UNIVERSITY CLOSED!)**
- 9/29/2017 (F) – 10/1/2017 (Su): GDEX conference in Columbus (bonus points!)
- **10/5/2017 (R), 10/6/2017 (F): Fall Break (NO CLASSES!)**
- 10/7/2017 (Sa): Midterm grades available on MySSU
- **10/30/2017 (M): Registration for Spring Semester starts (M=Seniors, Veterans, etc. T=Juniors, etc.)**
- **11/1/2017 (W): Last day to drop a class on MySSU**
- 11/3/2017 (F): Shawnee 2017 gaming conference (bonus points!)
- 11/10/2017 (F): Veterans Day (UNIVERSITY CLOSED!)
- **11/22/2017 (W) – 11/24/2017 (F): Thanksgiving Break (NO CLASSES (W), UNIVERSITY CLOSED (R,F)!)**
- 12/8/2017: Last day to petition to graduate, Last day of classes
- 12/9/2017 (Sa) – 12/15/2017 (F): Final Exam week
  - **Section01: Wednesday 12/13/2017 @ 8:00am**
  - **Section02: Monday 12/11/2017 @ noon**
- 12/20/2017 (W): Final grades available on MySSU

