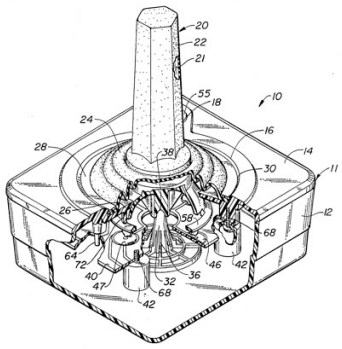
| ETGG3801 | Real-time Interactive Programming I | Fall 2019 |
|---|---|---|

Section01: TR 12:00-2:15pm in ATC256 Section02: TR 9:00-11:15am in ATC255

**Instructor**: Jason Witherell
Office & Office-hours: M-Th 8:15am – 9pm, W 2:30-3:30pm (or by appointment)
jwitherell@shawnee.edu
blackboard.shawnee.edu (course content and grades)



**Catalog Description**:

Realtime Interactive Programming is a two-semester sequence that puts into practice all of the information and knowledge gained in the previous courses. In this sequence the students first identify, then build, the necessary components for a full working 3D simulation/game engine. ETGG3801 lab activities focus upon investigating existing 3D engines and then designing and implementing simple simulations/games upon a modern 3D engine. Prerequisite: ETGG 2802 lecture hours. 2 lab hours 3 Course/Lab Fee

**Student Learning Outcomes / Course Goals (and relative weight)**: *Upon completion of this course, you should…*

- (70%) Have some experience using a commercial game engine
- (10%) Understand the components of a typical game engine.
- (20%) Be able to effectively develop software in a group environment

Student Learning Outcomes / Course Goals (and relative weight): For ETGG3802 (the follow-on course)

- (35%) Become intermediate-level C++ programmers
- (35%) Have implemented a basic, but functional game engine and a working "tech demo" using that engine.
- (15%) Understand the components of a typical game engine.
- (15%) Be able to effectively develop software in a group environment

**Textbooks / Suggested References**: None! Just use your Google-Fu!

**Jason's email policy**: I make every attempt to check my email once a day M-F (generally around 8am). If I have large numbers of students in my office hours, though, an email can sometimes take a few days to get a response. Also, I generally don't check my email after 5pm and rarely, if ever, on weekends. If you need a more timely response, make sure to come to office hours or better yet, ask questions in class!

**Grading System**: Your grade will be based on these weighted total (colors match the SLO's above).

- (10%) In-class, follow-along tutorials
- (60%) Out-of-class, ongoing assignments
- (5%) Test I (mostly Unity, some pencil-and-paper) (tentatively on 10/1/2019)
- (5%) Test II (mostly Unreal, some pencil-and-paper) (tentatively on 11/12/2019)
- (20%) Final group project, broken up into several milestones / interval-grades

| **Min%** | **94** | **90** | **87** | **84** | **80** | **77** | **74** | **70** | **67** | **64** | **60** | **0** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Grade** | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | F |

**Lab Assignments:** This is the focus of this course. It is very important that you attend and participate in lecture. Make sure you truly understand what is being asked of you (ask if you're not 100% clear) early. Don't procrastinate.

All labs are to be done *individually* (except the group project, obviously). Unless I tell you otherwise, assume there is no paired-programming (it's caused too many troubles in recent years). It's OK to talk about general solutions (for example, ask a friend to explain what I meant by bullet #4 on the lab specs), but don't in any way (verbally, visually, electronically, etc.) share code / blueprints / settings of any kind. These labs are usually so open-ended that it's painfully obvious if two

people shared code. If in doubt if you're in any danger of getting accused of cheating, ask. Lab assignments are due on the deadline (the blackboard date is the "authority"). No late work will be accepted without a valid *written* excuse (e.g. doctor's note, documentation of a death in the family, etc.).

**Quizzes and Exams:** I don't plan to give announced or pop quizzes (other than the two exams). I do reserve the right, though, if large numbers of students aren't attending class or paying attention during class. If I do, these will count as a (small) lab grade**.** Quizzes and exams are generally Closed-note, closed-book, closed-computer* and HARD😊 Listen to in-class announcements for the exact due date. No makeups without prior arrangement and / or *written* excuse)

*- I'm going to do a "Paul-style" test. You do a (short) written portion, turn it in, then do a computer exercise.

**Attendance**: will be taken every day. During group-work (last third of the semester), this will dramatically affect your grade (again, assuming you don't have a valid *written* excuse). During the unity / unreal tutorial phases, points will be given for completing the in-class exercises for the day. During lab-time for the individual unity / unreal project, you can decide if coming to class is worth your time. Regardless of the day, if you miss class, you are responsible for *anything* covered in class, including announcements, corrections to the lab specs and changes to due-dates, tests, etc.

**Bonus Opportunities**: I'm going to this a bit different this time. Instead of a (homework) point-value, bonus opportunities will be a percentage that gets stacked on top of your overall grade. Here are the current bonus opportunities I have planned (more may be added as the semester evolves):

- Game Jam #1: Participate, use the game engine we're using in-class, demo on Sunday = +2%
- Game Jam #2: Same restrictions = +2%
- GDEX: Attend at least one day = 1%
- SGC: Attending = 0.5%, Participating (booth, host a panel, VIP-handler, etc.) = +1%

**Resources for help:**

- The instructor – I should be your first line of defense
- The class SI??? Is there interest? If so, I'll try to secure funding – but this class will be lower priority than the 1000/2000-level courses.
- Your academic advisor: career advice, etc.
- Adam Miller (ATC302), Engineering Technologies chair: trouble with instructor, changing majors, paperwork, etc.
- Administrative Assistant (ATC308): finding professors, making appointments, filling out paperwork, etc.
- Lindsay Monihen (MAS132), CPS advisor: academic crises, financial aid questions, transferring, etc.
- Dean of Students Office (UC 222): resolution of academic and non-academic difficulties.
- Student Ombudsperson, Linda Hunt (ADM 140): help with appeals, complaints.

**University ADA Statement (2019-2020)**

Any student who believes s/he may need an academic accommodation based on the impact of a documented disability should first contact a Coordinator in the Office of Accessibility Services, Hatcher Hall, 740-351-3106 to schedule a meeting to identify potential reasonable academic accommodation(s). Students are strongly encouraged to initiate the academic accommodation process in the early part of the semester or as soon as the need is recognized. After meeting with the Coordinator, students are encouraged to meet with their instructors during the instructor's office hours to discuss their specific needs related to their disability. The academic accommodation letter will be sent to the instructor and student via secure e-mail prior to the semester start date. Any questions regarding the academic accommodations on the letter should be addressed to the Coordinator of Accessibility Services. If a student does not make a timely request for academic accommodations and/or fails to meet with the Coordinator of Accessibility Services, a reasonable academic accommodation might not be able to be provided

**Important Dates:** Note the student business center generally closes around 4pm.

- 8/26/2019 (M): classes begin
- **9/2/2019 (M): Labor Day (UNIVERSITY CLOSED!)**
- 10/11/2019 (F) – 10/13/2019 (Su): GDEX conference in Columbus (bonus points!)
- **10/3/2019 (R), 10/4/2019 (F): Fall Break (NO CLASSES!)**
- 10/12/2019 (Sa): Midterm / Progress Report available on MySSU
- **10/28/2019 (M): Registration for Spring Semester starts (M=Seniors, Veterans, etc. T=Juniors, etc.)**

- **10/30/2019 (W): Last day to drop a class on MySSU**
- 11/11/2019 (M): Veterans Day (UNIVERSTY CLOSED!)
- 11/15/2019 (F) – 11/16/2019 (Sa): SGC 2019 (bonus points for attending, more for participation!)
- **11/27/2019 (W) – 11/29/2019 (F): Thanksgiving Break (NO CLASSES (W), UNIVERSITY CLOSED (R,F)!)**
- 12/6/2019 (F): Last day of classes, Last day to petition to graduate (Spring2020)
- 12/9/2019 (M) – 12/13/2019 (F): Final Exam week
  Section01 exam time is Tuesday 12/10/2019 12-1:50pm
  Section02 exam time is Thursday 12/12/2019 8-9:50am
- 12/13/2019 (F): Fall Commencement
- 12/18/2019 (W): Final, official, grades available on MySSU