

Course Title: SDE 201 Multimedia Authoring

Course Leader: David Maruszewski

Expected Learning Outcomes for Course

- Analyze, select and apply tools appropriate for a specific solution
- Logically formulate scripts and/or programs to solve problems
- Understand and articulate interactivity in the gaming industry, including the connectivity between computer art and programming
- Apply programming and artistic theory in practical applications
- Apply rudimentary Physics and Trigonometry principles

Assessment

(How do students demonstrate achievement of these outcomes?)

The students have an overarching project. This project has an assessment sheet associated with it. The sheet was created to directly relate to the outcomes. It uses a Poor-Excellent Scale, with multipliers to prioritize the outcomes tested.

A supplemental (3rd of the semester) exam is issued to help confirm the findings of the project grade.

Validation

(What methods are used to validate your assessment?)

Currently, all grades sheets are held for two semesters and composite data is used to show trends. COGs from past years are maintained to see trends and improvements (or declines).

Results

(What does the data show?)

1. Preparatory work was lacking and more time needs to address them in class.
2. Most students understand basic artistic theory, although have a difficult time applying knowledge (in a majority, but not a vast majority on projects)
3. Many students have problems in time management
4. Students do retain much information from the SDE 102 course and can employ them in this course
5. Coding and artistic theory can be accomplished (well) by the students in a single project
6. Scripting and coding were understood and understood well at least at the rudimentary level.
7. Having a platform (Android phone) to place their work on helps give the student a firm direction to go.
8. Web searches and research aided students in creating better applications and animations, as well as foster their creativity. These have been used as an alternative to a formal textbook.
9. There is a problem with too much material needed to be presented early. Working on projects would be great, but often catching up on material at the end of the semester occurs. It is unclear how to overload the first half of the semester as needed, or remove unneeded parts.
10. Students' projects vary significantly and having only set topics to teach isn't ideal. Some projects might be disadvantaged based on the breadth of what we cover.

11. Students tend to take on tasks that they are not equipped, nor motivated to deal with.

Follow-up

(How have you used the data to improve student learning?)

Response in order of last section's numbering:

1. Using paper prototypes addressed planning work and usability issues. This worked well again but needs early involvement. All prep work attained an A- average for the class with paper prototypes attaining an A+ average.
2. In this class and SDE 102, we look at others' works in order to see how professionals apply theory. This seems to be reaping benefit in this course. More time is needed to dedicate to this. "Design, Visuals and Animations, and Composition and Presentation" were assessed and received slightly above "Average/Satisfactory" for the class average.
3. More due dates and smaller projects are given in order to keep students on track. It doesn't promote as much responsibility, but it did have a good outcome. This worked this year due to having things due every week even though most of the deliverables are made to complete the large project. Explaining this is a good method to use when doing any large project would be useful.
4. Maintained, and a slight recap at the beginning of the semester helps them to freshen up their skills. I increased this more again and this had continued better results.
5. Maintained. The single project work well as long as content, scope deadlines are well thought out.
6. Applications and hands on teaching help maintain this. Some scripting was introduced earlier as well as getting it to its vehicle. This did get students understanding higher as well as gave them more confidence in the work.
7. This worked very well. They all had proper dimensions, sizing, applications, etc. Although more devices are needed. We have 4 Android devices now and have just attained a iPad. The iPad will allow students to have more options. "Functionality, Scripting" were assessed and received around "Average" for the class average.
8. This had mixed results. Although students surf the web often, I find that they don't like to use it for help. Often they are easily confused by explanations. We will be going back to a classic textbook next year.
9. Ongoing options are being looked at. We were able to remove some initial lectures and fill them in with more scripting and hands on material.
10. During the semester, 30 minutes per week will be devoted to student question that are specific to their projects. They will also be allowed more time to work and experiment in class.
11. Currently, I have students pitching their projects, etc. However, I also think a one-on-one sit-down with them is needed to go over what is practical and fits their learning type.

Budget Justification

(What resources are necessary to improve student learning?)

This course's focus was redirected to making applications for mobile devices. This last semester we used Android. More Android Phones to be shared by students would be helpful. We currently only have 2 phones and 2 gTablets. A variation of devices would be nice. Allowing students to program on any handheld device or tablet would give them a wide breadth of skills and experience.