COURSE SUMMARY REPORT
Numeric Responses

University of Washington, Bothell
Sci, Tech, Engr. & Math
Science, Tech, Engr. & Math
Term: Spring 2020

IASystem
The Course Evaluation Standard

CSS 385 A
Introduction To Game Development
Course type: Online

Taught by: Yusuf Pisan
Instructor Evaluated: Yusuf Pisan-Lecturer

Evaluation Delivery: Online
Evaluation Form: Y
Responses: 23/43 (53% high)

Overall Summative Rating represents the combined responses of students to the four global summative items and is presented to provide an overall index of the class's quality:

Median	College Decile
3.8	**2**
(0=lowest; 5=highest)	(0=lowest; 9=highest)

Challenge and Engagement Index (CEI) combines student responses to several *IASystem* items relating to how academically challenging students found the course to be and how engaged they were:

CEI: 5.0
(1=lowest; 7=highest)

SUMMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	DECILE RANK Inst	College
The remote learning course as a whole was:	23	26%	30%	26%	4%	13%		3.7	2	3
The course content was:	23	26%	35%	17%	9%	9%	4%	3.8	2	3
The instructor's contribution to the course was:	23	35%	30%	13%	4%	4%	13%	4.0	2	3
The instructor's effectiveness in teaching the subject matter was:	23	22%	30%	26%	4%	9%	9%	3.6	2	2

STUDENT ENGAGEMENT

Relative to other college courses you have taken:	N	Much Higher (7)	(6)	(5)	Average (4)	(3)	(2)	Much Lower (1)	Median	DECILE RANK Inst	College
Do you expect your grade in this course to be:	23	9%	43%	9%	22%	17%			5.5	6	7
The intellectual challenge presented was:	23	26%	22%	17%	22%	9%	4%		5.4	3	3
The amount of effort you put into this course was:	23	30%	30%	17%	17%	4%			5.9	5	5
The amount of effort to succeed in this course was:	23	22%	35%	17%	22%	4%			5.7	4	4
Relative to similar courses taught in person, your participation in this course was:	23	22%	13%	26%	22%	17%			4.9		
Relative to similar courses taught in person, your success in this course was:	23	13%	13%	30%	26%	13%	4%		4.7		

On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers and any other course related work?

Class median: 11.1 Hours per credit: 2.2 (N=23)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
	4%	4%	13%	35%	13%	4%	4%	13%	4%		4%

From the total average hours above, how many do you consider were valuable in advancing your education?

Class median: 8.5 Hours per credit: 1.7 (N=23)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
	4%	22%	17%	13%	22%	4%	17%				

What grade do you expect in this course?

Class median: 3.7 (N=23)

A (3.9-4.0)	A- (3.5-3.8)	B+ (3.2-3.4)	B (2.9-3.1)	B- (2.5-2.8)	C+ (2.2-2.4)	C (1.9-2.1)	C- (1.5-1.8)	D+ (1.2-1.4)	D (0.9-1.1)	D- (0.7-0.8)	E (0.0)	Pass	Credit	No Credit
26%	61%	4%	9%											

In regard to your academic program, is this course best described as:

(N=23)

In your major	A core/distribution requirement	An elective	In your minor	A program requirement	Other
26%		74%			

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STANDARD FORMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	DECILE RANK Inst	College
The effectiveness of this remote course in facilitating my learning was:	23	26%	26%	26%	9%	9%	4%	3.6		
Timeliness of instructor response to assignments was:	23	43%	35%	9%	9%	4%		4.3		
Quality/helpfulness of instructor feedback was:	23	43%	30%	4%	9%	9%	4%	4.3		
Clarity of course objectives was:	23	35%	26%	13%	13%	4%	9%	3.9	2	
Clarity of student responsibilities and requirements was:	23	22%	35%	22%	13%	4%	4%	3.7	2	2
Usefulness of reading assignments in understanding course content was:	23	22%	17%	26%	17%	13%	4%	3.1		
Usefulness of written assignments in understanding course content was:	23	17%	30%	22%	13%	13%	4%	3.4		
Usefulness of online resources in understanding course content was:	23	39%	39%	4%	13%	4%		4.2		
Evaluative and grading techniques (tests, papers, projects, etc.) were:	23	39%	22%	22%	9%	4%	4%	4.0	3	4
Reasonableness of assigned work was:	23	39%	22%	9%	17%	4%	9%	4.0	3	4
Organization of materials online was:	23	35%	26%	13%	13%	9%	4%	3.9		

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Student Comments

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STANDARD OPEN-ENDED QUESTIONS

Was this class intellectually stimulating? Did it stretch your thinking? Why or why not?

1. Only when we started the group project did I feel like I was learning anything about Unity. Besides this, the first half of the class had the professor expect us to complete assignments with little to no preparation.

2. It was fine, assignment at beginning were not very well thought out in my opinion. There was not guidance.

3. Yes, it gave me a better understanding on how to think about structuring games, and other programs.

4. This course was actually interesting to me as it wasn't one of the first programming courses I could breeze through being a long term developer. I had to learn the tools.

5. No, didn't find it very helpful. Maybe for students who want to work in this field.

7. The introduction to Game Development was a interesting and fun course in most aspects. I found that one learned a lot from the practical process of trying to make a video game from concept to final playable design. This is no small task and even the most proficient game designers sometimes building something that is unfeasible or runs into the sunken cost fallacy. I also got to try out my project management skills and will be reflecting on what worked and what didn't.

8. Yes, I gained experience in unity and feel confident in my ability to use it now.

9. Learning about game theory was great. I liked that the class lecture is more focus on game theory rather than how to code because learning code can be done individually.

10. Yes and No. I would have loved more challenges along the way, instead of the comprehensive indie-game developing- scenario, which didn't teach us much. Designing a sub-optimal game in few weeks teaches us many things, but what it doesn't teach is the long-term technical skills needed to actually develop a game, but rather a mash of everything that happens in a game "production" scenario. I think the curriculum needs to get changed very much, so that this course can be borderline CS course (not borderline VLPA)

11. Yes, writing scripts in Unity can be quite difficult at times. Sometimes, it is hard to research how to do a certain feature because there is limited documentation online, or it's hard to describe/word what you want to see in the game.

12. Super great class. Never had used Unity before so it definitely stretched my thinking, as there was nothing familiar to fall back on. Really interesting learning how to start a game from scratch and build it into something worthwhile/

14. The pace of the course kept it interesting and helped keep me engaged. The professor clearly has passion for the subject that helped me learn.

15. Yes. It was intellectually challenging and it did stretch my thinking. I think because I had never used unity before and had never learned anything about game engines before.

16. Good environment for exploring new topics. Very open-ended in how you approach a topic, which was a lot of fun!

What aspects of this class contributed most to your learning?

1. The group project, was able to learn about Unity through experimentation and have fun with group mates.

2. Learning with my group during the project.

3. Well structured and paced assignments

4. Hands-on aspect of working with the tools

5. Assignment and final project.

6. The Unity projects and the class events (especially USC Games Expo) were the most valuable takeaways in this class. I feel that I'm walking away with a strong foundation for further exploration of Unity, and the games we looked at in lecture and online events were a good source of inspiration and motivation.

7. Learning Unity was really interesting and fun. I would say what really pushed my learning were just the challenges of the final project. Creating a game requires a lot of knowledge and takes time. Each step was a new learning experience and I took much insight into my failings as much as my successes.

8. The assignments were where all the learning happened. You can't make games without pulling out the google skills.

9. watching other people's game and obtain inspiration from it.

10. The need to actually produce something by the deadline, pushed me to learn different stuff.

11. Working in a team for game development meant that good communication matters a lot more compared to many other classes. It helped me see how effective communication can really impact productivity and overall enjoyment of working in a group.

12. Doing the assignments. A lot of Unity is just searching for solutions on the web, so the assignments really helped me get a better grasp of the software. YouTube is very helpful.

13. The homework assignments actually contributed to my learning, however they needed to be discussed more on how to achieve the finished products as I felt lost while trying to complete them.

14. The ability to explore and use unity in my own way and self learning helped me the most, but when the professor added explanations of certain things in unity, it became much easier to program in unity and do the assignments.

15. The group projects.

16. Working in a group and being able to share game progress in the class.

What aspects of this class detracted from your learning?

1. The projects, excluding the group project. The professor didn't teach us anything about Unity so it felt like we were working on these completely blind.

2. Teacher did not give enough guidance with some assignment. Some things were unclear, kept changing assignments or not posting them at all sometimes.

3. Lack of direction or too much expectation for some assignments.

4. The fact I was locked in a tiny room for 12 hours a days.

5. waste a lot of time during class instead of learning new things

7. I think the first assignments required a little too much "learning on demand". What I mean by this is that not a great amount of instruction was given to accomplish the assignments just as we were trying to wrap our heads around an application that is complex and very nuanced. Guidance and access to high quality learning material is a must. Having a central location to learn key elements might be useful such as a wiki that I have seen in other courses.

9. 2020 spring had a lot of issues on various aspects from COVID to Protest.

10. Dev log requirements - Explicit themes - Explicit requirements for "game", which is an artistic phenomena in itself, and restrictions just make it meaningless.

11. Not much guidance on writing scripts early in the quarter. I think exercises/assignments to write basic scripts early on can help make the jump to writing your own scripts for assignments less daunting.

12. On the other hand, Unity can be very tricky to understand, as the documentation usually isn't that...good. It can take a long time to find answers to your problem or realize you were making a silly mistake. The fact that there isn't a clear resource is difficult.

13. Lack of lectures/class time to learn how to use unity. Throwing someone into unity without telling the class more about how to achieve what is expected.

14. Nothing really, but group assignments suck and 1 group member didn't put up much work, which means our game was built by basically 2 people when we had 3, it could have been way better, but I can't do all the work all the time.

15. Can't think of anything now.

16. Zoom

What suggestions do you have for improving this class generally?

1. Spend first half of class teaching us about how to write scripts and better understand the Unity editor.

2. More guidance and clarity on smaller assignments.

3. More structure in how to operate the Unity engine rather than a focus on game design.

4. Better definition of asssigments

5. Professor should make class time more productive. Have reading and lecture on the assignments that were given. Work more on lecture slides. Don't just give class time for students to work on their final project, make some time to answer their questions and concerns for the final project

6. I am not sure how you might accomplish this, but helping student groups structure their final projects might be useful. My group had more than the average number of members and while we had plenty of work to keep everyone busy, we struggled with communicating the roles of each of our development efforts and tying them together seamlessly.

7. Start group forming in the second week of class and have all assignments be group based for the same number of people as the final project. Forming and group and developing a rapport takes time. Giving students the added benefit of trying communication techniques and organization before the final project. This would make it easier for groups to decide if they work well together or if not find other groups to join.

8. Before the major figure it out yourself assignments, It would be wise to have a lecture that teaches the unity basics such as object instantiation, the different types of movement, and best practices for modular code using prefabs.

9. This is good enough.

10. More Engine specific coding/mechanics practice/ animation trees/ animation control states/ etc.

11. I liked the encouragement to watch a game expo or video during some of the class time. These are less intensive than lectures and can help students recuperate their focus, especially later into the quarter.

12. I'd love if there was just a simple "Getting to know Unity assignment" where students would be given a list of 25+ things, and to solve them, they'd have to search the web and look around for answers. Then, when they needed to work on future assignments, they could look back at that guide. The professor could also go over the multiple ways to tackle a problem and why someone might use one method over another.

13. More lectures/smaller assignments

14. Install a boot somewhere that can kick students who are slackers in the butt.

15. I shared a lot of my suggestions in class.

16. Modify the beginning assignments, and potentially break them into smaller chunks so students can check in their current work and get feedback.

If this course were offered remotely again, what suggestions do you have to improve the student experience?

1. Prepare more lecture slides teaching about C# scripts and concepts such as RigidBody, Collision.

2. N/A

3. More focus on being able to work with game engines, then after that, talk about game design.

4. Clarity on timeline and assignments, otherwise it was good

5. I recommend to be in person. If offered remotely, maybe more lectures will help

7. Reduce the amount of lectures in each zoom session and spread them out further into the quarter. Instead of having each team report to the group one after another, have each group put together a quick self guided presentation or video of key information. Have alpha and beta test be the entire day instead of just class time. Making testing more accessible to allow for multiple play throughs is important. It helps provide valuable feedback. Also having the professor give constructive feedback on each build would be useful as well.

8. Perhaps compile the tutorials relevant to assignments that other students have found helpful. There are very great videos online explaining the different types of movement and when to use them (translate vs adding force), as well as for more niche problems such as best practices for not getting a ton of merge conflicts when using git and unity in a team. (Hint: make everything in the scene a prefab).

9. zoom and discord is good enough.

10. I believe this course works best in a Remote situation! So I wouldn't change anything in that regard, as professor Pisan delivered it perfectly. To be clear, my critique is aimed at the Curriculum, which I disagree with strongly.

12. Nothing really comes to mind, as I think this course did a really good job of keeping us engaged and together.

14. Better instructions for assignments and requirements for turning things in. It was obvious the structure of the class went through a major change, but it felt very rushed and incomplete which lead to frustration and annoyance.

15. Start off a bit slower with the assignments.

16. None

IASystem Course Summary Reports summarize student ratings of a particular course or combination of courses. They provide a rich perspective on student views by reporting responses in three ways: as frequency distributions, average ratings, and either comparative or adjusted ratings. Remember in interpreting results that it is important to keep in mind the number of students who evaluated the course relative to the total course enrollment as shown on the upper right-hand corner of the report.

Frequency distributions. The percentage of students who selected each response choice is displayed for each item. Percentages are based on the number of students who answered the respective item rather than the number of students who evaluated the course because individual item response is optional.

Median ratings. *IASystem* reports average ratings in the form of item medians. Although means are a more familiar type of average than medians, they are less accurate in summarizing student ratings. This is because ratings distributions tend to be strongly skewed. That is, most of the ratings are at the high end of the scale and trail off to the low end.

The median indicates the point on the rating scale at which half of the students selected higher ratings, and half selected lower. Medians are computed to one decimal place by interpolation.[1] In general, higher medians reflect more favorable ratings. To interpret median ratings, compare the value of each median to the respective response scale: *Very Poor, Poor, Fair, Good, Very Good, Excellent (0-5); Never/None/Much Lower, About Half/Average, Always/Great/Much Higher (1-7); Slight, Moderate, Considerable, Extensive (1-4).*

Comparative ratings. *IASystem* provides a normative comparison for each item by reporting the decile rank of the item median. Decile ranks compare the median rating of a particular item to ratings of the same item over the previous two academic years in all classes at the institution and within the college, school, or division. Decile ranks are shown only for items with sufficient normative data.

Decile ranks range from 0 (lowest) to 9 (highest). For all items, higher medians yield higher decile ranks. The 0 decile rank indicates an item median in the lowest 10% of all scores. A decile rank of 1 indicates a median above the bottom 10% and below the top 80%. A decile rank of 9 indicates a median in the top 10% of all scores. Because average ratings tend to be high, a rating of "good" or "average" may have a low decile rank.

Adjusted ratings. Research has shown that student ratings may be somewhat influenced by factors such as class size, expected grade, and reason for enrollment. To correct for this, *IASystem* reports **adjusted medians** for summative items (items #1-4 and their combined global rating) based on regression analyses of ratings over the previous two academic years in all classes at the respective institution. If large classes at the institution tend to be rated lower than small classes, for example, the adjusted medians for large classes will be slightly higher than their unadjusted medians.

When adjusted ratings are displayed for summative items, **relative rank** is displayed for the more specific (formative) items. Rankings serve as a guide in directing instructional improvement efforts. The top ranked items (1, 2, 3, etc.) represent areas that are going well from a student perspective; whereas the bottom ranked items (18, 17, 16, etc.) represent areas in which the instructor may want to make changes. Relative ranks are computed by first standardizing each item (subtracting the overall institutional average from the item rating for the particular course, then dividing by the standard deviation of the ratings across all courses) and then ranking those standardized scores.

Challenge and Engagement Index (CEI). Several *IASystem* items ask students how academically challenging they found the course to be. *IASystem* calculates the average of these items and reports them as a single index. *The Challenge and Engagement Index (CEI)* correlates only modestly with the global rating (median of items 1-4).

Optional Items. Student responses to instructor-supplied items are summarized at the end of the evaluation report. Median responses should be interpreted in light of the specific item text and response scale used (response values 1-6 on paper evaluation forms).

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[1] For the specific method, see, for example, Guilford, J.P. (1965). Fundamental statistics in psychology and education. New York: McGraw-Hill Book Company, pp. 49-53.