B EE 271 AB
Digital Circuits And Systems
Course type: Face-to-Face

Taught by: Nicole Hamilton
Instructor Evaluated: Nicole Hamilton-Lecturer

Evaluation Delivery: Online
Evaluation Form: H
Responses: 8/18 (44% moderate)

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
3.3	**1**
(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: 5.9
(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	DECILE RANK College
The lab section as a whole was:	8		38%	25%	12%	25%		3.0	0	1
The content of the lab section was:	8		38%	12%	50%			2.5	0	0
The lab instructor's contribution to the course was:	8	50%	12%		12%	12%	12%	4.5	4	6
The lab instructor's effectiveness in teaching the subject matter was:	8		50%	25%	12%		12%	3.5	1	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	DECILE RANK College
Do you expect your grade in this course to be:	8	12%			88%				4.1	0	1
The intellectual challenge presented was:	8	38%	38%	12%	12%				6.2	8	7
The amount of effort you put into this course was:	8	38%	38%	12%	12%				6.2	8	7
The amount of effort to succeed in this course was:	8	62%	12%	12%	12%				6.7	9	8
Your involvement in course (doing assignments, attending classes, etc.) was:	8	38%	25%	12%	25%				6.0	6	6

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: 8.2 (N=8)

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
	12%	12%	12%	38%		12%					12%

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

Class median: 5.5 (N=8)

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
	25%	25%	12%	25%						12%	

What grade do you expect in this course?

Class median: 3.2 (N=8)

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
	25%	38%	25%		12%									

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

(N=8)

In your major	A core/distribution requirement	An elective	In your minor	A program requirement	Other
88%				12%	

STANDARD FORMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	DECILE RANK Inst	DECILE RANK College
Explanations by the lab instructor were:	8	25%	12%	25%	25%	12%		3.0	0	0
Lab instructor's preparedness for lab sessions was:	8	12%	38%	25%	12%	12%		3.5	1	3
Quality of questions or problems raised by the lab instructor was:	8		50%	25%	12%	12%		3.5	1	2
Lab instructor's enthusiasm was:	8	50%	25%	12%	12%			4.5	3	4
Student confidence in lab instructor's knowledge was:	8	50%	38%		12%			4.5	3	4
Lab instructor's ability to solve unexpected problems was:	8	25%	50%	12%	12%			4.0	4	5
Answers to student questions were:	8	12%	38%	25%	25%			3.5	1	2
Interest level of lab sessions was:	8		38%		50%		12%	2.2	0	0
Communication and enforcement of safety procedures were:	8	12%	62%	12%	12%			3.9	2	4
Lab instructor's ability to deal with student difficulties was:	8	12%	38%	12%	12%	25%		3.5	2	3
Availability of extra help when needed was:	8	12%	38%	12%	12%	12%	12%	3.5	1	2
Use of lab section time was:	8		25%	38%	12%	25%		2.8	0	0
Lab instructor's interest in whether students learned was:	8	12%	50%	12%	12%	12%		3.8	1	1
Amount you learned in the lab sections was:	8		25%	38%	25%		12%	2.8	0	0
Relevance and usefulness of lab section content were:	8	25%	25%	12%	25%	12%		3.5	1	1
Coordination between lectures and lab activities was:	8		12%		38%	25%	25%	1.5	0	0
Reasonableness of assigned work for lab section was:	7		43%	29%	14%	14%		3.2	1	1
Clarity of student responsibilities and requirements was:	8		50%	25%	25%			3.5	1	2

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STANDARD OPEN-ENDED QUESTIONS

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

1. Yes the lab was very stimulating and challenging. Understanding the concepts took some time.

4. labs are very important in the process of learning, but it can be much more efficient if it follows the class lectures

5. The labs really pushed me to think about how the hardware was going to respond to verilog coding. It definitely worked well with the less code-intensive lecture section of the course.

What aspects of this class contributed most to your learning?

1. Working on the lab with no help.

3. learning Verilog was really useful

4. the first lab I learned a lot from it

5. I thought Nicole did a good job of answering questions and being available during the labs. The labs themselves really pushed me to find solutions to problems and look for online resources to get a better understanding of the language syntax and meaning.

What aspects of this class detracted from your learning?

1. Having no assistance in troubleshooting the lab.

2. lecture and lab sections need to be synced better

3. lab 1 was so different then the course and other labs and wasn't very good. we did not go over much syntax for Verilog which made it hard to code

4. there was too much verilog coding

5. The labs were a pretty stressful environment. It felt crowded in the room, and I could sense how nervous everyone was about completing their projects the whole time we were there, which reinforced my own desire to not be there. It was much better when we were able to check out an FPGA board and work on our own, the downside being that there was no one to answer questions outside of lab.

What suggestions do you have for improving the class?

1. Have a designated TA for help with lab.

3. go over more Verilog syntax. get rid of lab 1 and replace it with more Verilog. allow for more time on the debounce section of lab 3

4. I would like to see more hardware lab assignments then too much verilog coding.

5. Add a few more hints about how to set up the verilog code for lab 3. It was a lot of freedom to have to fiddle with the code until it worked, but it also allowed for a ton of little mistakes, and with so little time to complete the lab (and very few people with coding experience in the class), it would help if the most common pitfalls are accounted for in the lab documentation.

6. Cover verilog more in depth, prior to the final lab. Perhaps a practice verilog session. Tie in lectures to labs better.

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).

[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.