ANNUAL FACULTY REVIEW, 2013

Faculty Member's Statement

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TEACHING

Course Load

Spring 13:	Math 170, Calc I	4 credits	40 enrolled
Fall 13:	Math 170, Calc I	4 credits	74 enrolled (1 AUD, 1 late W)

Issues from 2012 Evaluations and Proposed Actions for 2013

There were no major concerns. Minor concerns fell in the areas of course organization, use of class time, the balance of direct instruction vs. other pedagogical choices, and growing pains from adopting a new LMS (WebAssign). The most significant concern was that the combination of the above may have impacted student success in the last month of the course.

Proposed actions were:

1. Invest heavily in my knowledge of the LMS. Leverage this to increase organization, guide class activities, replace and/or supplement direct instruction, and smooth out difficulties from the initial adoption.

2. Participate in the CTL Course Design Institute in May 2013. Implement redesigned course in the fall.

Actions Taken in 2013 and Observed Results

1. I successfully and substantially increased my expertise with WebAssign, and was able to capitalize on this by improving on all the issues from

2012 evaluations. This resulted in increased student success and excellent evaluations in the spring 2013 semester.

2. I attended the course design workshop, but this was not successful.

   I was unable to adapt the ideas from that workshop into my current course design. Also, I took on a class of 80 students (double a normal section) which was scheduled into an unsuitable room. The room assignment forced me into unwanted changes and compromises.

   The resulting melange of a prior (highly successful) course design, plus some modifications coming out of the course design workshop, plus restrictions/requirements of a large lecture hall, was not nearly as successful as the spring course.

   Actually, on typical student success metrics, particularly exam performance and pass rates, the course design held up under heavy adverse pressure. Students learned, and students passed. But it was an uncomfortable and often painful experience for all involved.

Recap and Review of 2013 Evaluations

Full results are linked in Digital Measures. A summary of numerical results, including comparisons to Math 170, All Math, and All COAS benchmarks, is available on the next page. Response rates in both courses were over 80%, so this is fairly robust data.

Numbers and comments from the spring semester were excellent. Those from the fall semester were not. Fall term numerical scores are well below what I normally receive. There was one consistent negative theme in the commentary, best paraphrased as "This instructor does not teach. I have to teach myself."

My course design is intentionally very light on direct instruction. I very rarely provide step-by-step information on how to solve a particular problem. I rely on carefully constructed homework sets and ample in-class facilitation instead. Usually this is well received (see Spring evals) but this fall there were compounding factors:

- We were in a large lecture hall, making it difficult to facilitate and difficult to communicate to the class as a group when I needed to.

- I had twice as many students. I had additional peer mentors to keep the student/facilitator ratio where it would normally be, but this still seemed to have an impact.

- My model relies on facilitated active learning and it works best when I can respond to emerging trouble spots with just-in-time instruction. However, physical characteristics of the room – no whiteboard, poor AV system – made this difficult and less successful that it has been in other settings.

- My class structure depends on student buy-in and participation. If students cannot be persuaded to be active learners, then the model will be less successful. This semester there were a number that I failed to persuade.

Although the aggregate evaluation data shows lower student satisfaction there are some positives. There was still a large contingent of students who were very happy with the non-traditional model. The student outcomes were still good — the structured assignments worked, even if students were upset with my contribution to their learning. This is apparent in the evaluation data. Even students who rated the instructor characteristics as poor tended to rate the value of homework and feedback fairly high.

Proposed Actions for 2014[1]

I am still very confident that this course structure creates good outcomes. I plan to keep it in place, and continue to seek small improvements. It also seems to create high student satisfaction in small sections – which I am already seeing in my Spring 2014 Calculus class.

For fall 2014 I may once again be scheduled for a 80 cap class in a difficult room. My plan is to:

1. Try to get the class size reduced.

2. If this fails, try to get into a room that has better AV and whiteboards.

3. If this fails, be ready with alternative plans for providing direct instruction when it is needed.

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[1]Typo corrected 5/19/15. Previously said "2013".

4. And be ready for a few unhappy students, even if they are learning.

Spring 2013	Math 170		n = 34 of 40 (85%)		
Question	Max	My score	M170	MATH	COAS
Prepared	5	4.65	4.6	4.3	4.5
Fostered learning	5	4.59	4.3	4.1	4.3
Clear assessment plan	5	4.53	4.0	4.0	4.2
Clear objectives	5	4.53	4.3	4.1	4.3
Class organization	4	3.53	3.5	3.3	
Effective use of time	4	3.47	3.5	3.3	
Clear presentation	4	3.41	3.1	3.1	
Student questions	4	3.65	3.4	3.4	
Critical thinking	4	3.77	3.5	3.5	
Grading system	4	3.82	3.3	3.4	
Feedback	4	3.61	3.0	2.9	
Homework returned	4	3.38	3.5	3.3	
Fairness	4	3.73	3.5	3.5	
Classroom atmosphere	4	3.68	3.4	3.2	
Assignments	4	3.65	3.3	3.2	

Fall 2013	Math 170		n = 59 of 72 (82%)		
Question	Max	My score	M170	MATH	COAS
Prepared	5	4.29	4.4	4.3	4.5
Fostered learning	5	3.76	4.0	4.1	4.4
Clear assessment plan	5	3.73	3.9	4.1	4.3
Objectives	5	3.90	4.1	4.1	4.3
Class organization	4	3.12	3.3	3.3	
Effective use of time	4	2.88	3.3	3.3	
Clear presentation	4	2.56	2.9	3.1	
Student questions	4	3.09	3.2	3.4	
Critical thinking	4	3.51	3.4	3.4	
Grading system	4	3.54	3.3	3.4	
Feedback	4	3.03	2.9	2.9	
Homework returned	4	3.32	3.4	3.4	
Fairness	4	3.19	3.3	3.5	
Classroom atmosphere	4	3.00	3.2	3.2	
Assignments	4	3.27	3.2	3.2	