Teaching Portfolio

Prepared by Braden Czapla June 12, 2018

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1.1 Teaching Assistantships

Columbia University

• Fall 2018

- Course Title: Heat Transfer
- Instructor of Record: Arvind Narayanaswamy
- Teaching Staff: one instructor, one teaching assistant
- Student Enrollment: 60 undergraduates
- Responsibilities: attend lecture (3 hours weekly), plan & teach recitation (1.5 hours weekly), hold office hours (3 hours weekly), write homework, quiz, & exam solutions, and grade quizzes & exams.

• Fall 2017

- Course Title: Senior Design I
- Instructor of Record: Fred Stolfi
- Teaching Staff: one instructor, one teaching assistant, one grader, three staff mentors
- Student Enrollment: 55 undergraduates
- Responsibilities: hold office hours (2 hours weekly), manage deliverable submissions, schedule meetings & presentations for 13 student teams, and provide feedback during design reviews.

• Fall 2013

- Course Title: Introduction to Mechanics of Fluids
- Instructor of Record: Sinisa Vukelic
- Teaching Staff: one instructor, two teaching assistants, one grader
- Student Enrollment: 39 undergraduates
- Responsibilities: attend lecture (3 hours weekly), plan & teach recitation (1.5 hours weekly), hold office hours (1 hour weekly), and grade homework, quizzes & exams.

University of Rochester

• Spring 2013

- Course Title: Thermodynamics
- Instructor of Record: John. H. Thomas

- Teaching Staff: one instructor, four teaching assistants
- Student Enrollment: 73 undergraduates
- Responsibilities:
- Fall 2012
 - Course Title: Introduction to Fluid Dynamics
 - Instructor of Record: John. H. Thomas
 - Teaching Staff: one instructor, three teaching assistants
 - Student Enrollment: 69 undergraduates
 - Responsibilities:

1.2 Mentorship

Columbia University

- Fall 2017 to Spring 2018
 - Oversaw research project for undergraduate student. Gave feedback and direction of project. Taught how to use equipment and write SOPs.
- Summer 2016 to Fall 2016
 - Oversaw research project for master's student. Taught how to use equiment, write procedures, gave feedback and direction.

Section 2

Teaching Statement

idk

Diversity Statement

• Introduction

- Snapshot of how you embrace diversity.
- Share values and principles
- Demonstrate knowledge of institution's values
- Names experience and may include identity
- 3 narratives of how you applied
 - Can be teaching, research, or service (community, university, department)
 - Embodied diversity, scholarly diversity, curricular diversity
 - Each narrative must:
 - * Provide context
 - * Illustrate motivations
 - * Show active effort to think/work/engage with diversity
 - * Evidences success or continued work
- Conclusion
 - Reinforce intro
 - Reaffirm alignment with institution

Experiences to draw from:

- Queer
- Economic status
 - Having grown up floating around the poverty line in a much more affluent area, I can understand some of the ways economic issues creep into the classroom. It can really be a black cloud that envelops much of your life. I am now conscious of assuming anyone has the means to do things I think are cheap. I prefer open source softwares and free resources instead of expensive software and texts.
- Living in NYC?
- Narrative 1
- Narrative 2 Research Use of open source tools. Publishing them. Open science in general? ArXiV

 $\bullet\,$ Narrative 3 - Service? MEGA - keep costs down to be inclusive?

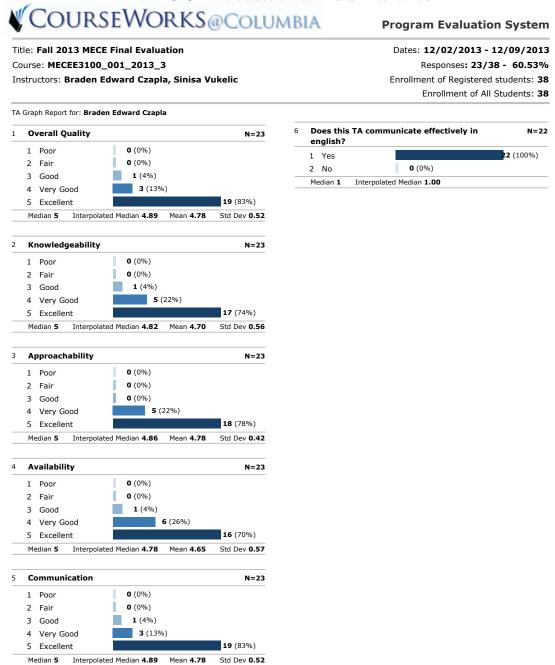
4.1 Summary of Numerical Scores

Category	Fluid Mechanics	Senior Design I	Heat Transfer	
Category	(n=23)	(n = 1)	(n=15)	
Overall Quality	4.78	5.00	4.93	
Overall Quality	0.52	0.00	0.26	
Knowledgeability	4.70	-	4.93	
Trilowledgeability	0.56	-	0.26	
Approachability	4.78	5.00	4.93	
Approachability	0.42	0.00	0.26	
Availability	4.65	-	4.80	
Availability	0.57	-	0.41	
Communication	4.78	-	4.87	
Communication	0.52	-	0.35	
Organization and	-	5.00	-	
Preparation	_	0.00	-	
Classroom Delivery	-	5.00	-	
Classicom Denvery	-	0.00	-	

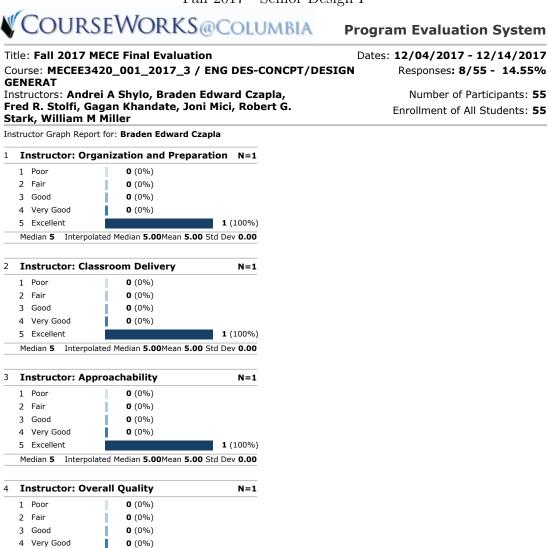
4.2 Summary of Written Feedback

4.3 Unredacted Evaluations

Fall 2013 - Introduction to Fluid Mechanics



Fall 2017 - Senior Design I



1 (100%)

1 (100%)

5 Excellent

1 Yes

2 No

Median 5 Interpolated Median 5.00Mean 5.00 Std Dev 0.00

0 (0%)

Would you nominate this professor for the SEAS Distinguished Faculty Award?

Median 1 Interpolated Median 1.00

Spring 2018 - Heat Transfer



Program Evaluation System

Title: Spring 2018 MECE Final Evaluation
Course: MECEE3311_001_2018_1 / HEAT TRANSFER

Instructors: Arvind Narayanaswamy

Dates: **04/23/2018 - 05/03/2018**Responses: **15/60 - 25.00%**Number of Participants: **60**

Enrollment of All Students: 60

1 2 3		Quality		N=15	
_	Poor		0 (0%)		
2	Fair		0 (0%)		
J	Good		0 (0%)		
4	Very G	Good	1 (7%)		
5	Excelle	ent		14 (93%	
N	1edian 5	Interpolate	ed Median 4.96 Mean 4.93	Std Dev 0.26	
2 k	Knowledgeability			N=15	
1	Poor		0 (0%)		
2			0 (0%)		
3			0 (0%)		
4	Very G	Good	1 (7%)		
5	Excelle	ent		14 (93%	
N	1edian 5	Interpolate	ed Median 4.96 Mean 4.93	Std Dev 0.26	
3 4	Approachability			N=15	
1			0 (0%)		
2			0 (0%)		
3			0 (0%)		
4		Good	1 (7%)		
5			. ,	14 (93%	
N	1edian 5	Interpolate	ed Median 4.96 Mean 4.93	Std Dev 0.26	
1 /	Availability			N=15	
1			0 (0%)		
2			0 (0%)		
3			0 (0%)		
4		Good	3 (20%)		
5				12 (80%	
N	1edian 5	Interpolate	ed Median 4.88 Mean 4.80	Std Dev 0.41	
5 (Communication				
1			0 (0%)		
2			0 (0%)		
3			0 (0%)		
4		Good			
_	Very G		2 (13%)	13 (87	

1 Yes 2 No 0 (0%) 3 N/A 0 (0%)	6	Does this TA communicate effectively in N=15 english?					
		1	Yes			15 (1	00%
3 N/A 0 (0%)		2	No		0 (0%)		
		3	N/A		0 (0%)		
Median 1 Interpolated Median 1.00	_	Median 1 Interpolated Median		ed Median 1.00			



Program Evaluation System

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Instructors: Arvind Narayanaswamy

Dates: 04/23/2018 - 05/03/2018

Responses: 15/60 - 25.00%

Enrollment of Registered Students:60

Enrollment of All Students:60

TA Comments Report for: Braden Edward Czapla

Q1 Comments

- Braden is without a doubt the best TA I've had through my Columbia Undergraduate education. He is what all other TA's should strive to be. He really does go above and beyond to ensure everyone in the class is on the same page and will not hesitate to take time out of his schedule to help you one on one. He's extremely responsive over email, very approachable and friendly, and above all, he really does seem to care about his students. I only wish that Braden could be a TA for some of my other classes!

Thanks Braden for everything. You are literally the best!

- Best TA I have ever had at Columbia. If Braden becomes a professor, his students will be blessed to have him.
- I've never had a better TA at Columbia. Really went above and beyond what was required of him in terms of helping students.
- Best TA I've had! Amazing! Would not be doing well without him.
- Braden was a fantastic TA. He had the material down, and always explained it very well. He really complemented the lectures well; when the latter left us wondering how to apply the material to an actual problem, he would show us methods and procedures to solve it. He was also very friendly and personable, which counts for a lot.
- Braden was the best TA! He was very good at putting Arvind's lectures into a digestible overview during each recitation and review session. Also, in office hours he would help you get to the answer instead of just giving you the answer which is a very underestimated trait. It was also clear that he cared about us and his TAing of our class. His communication was excellent with regard to answering emails, being clear about response time before our project was due, and answering questions in office hours. Thanks for helping us get through heat transfer!
- Braden is one of the best TAs that I have had in my undergraduate studies. He is very knowledgeable about the course material and is always able to answer my questions effectively. He is also very approachable and communicates well.
- Braden is by far the best TA I have ever had, period. I wish he could have taught me this course. He helped me access the material in a way the professor was unable to. He was incredibly knowledgeable, extremely patient, and very understanding. I think everyone in our course said at one point, "I love Braden," or "Thank god for Braden." If TGFB didn't catch on, another take-home quiz would have made it happen. Braden's recitations helped me more than all the lectures combined. He was always very prepared and organized the material for us so that we could see the big picture and understand the steps. He brought engaging real-world examples to the table and his sparkling sense of humour inevitably kept the mood light. Give him an award.



Program Evaluation System

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Dates: 04/23/2018 - 05/03/2018 Responses: 15/60 - 25.00% Enrollment of Registered Students:60 Enrollment of All Students:60

TA Comments Report for: Braden Edward Czapla

- Super helpful and resourceful even outside of office hours. Made a tough class easier to understand
- VERY helpful. Quick to respond to email and office hours were very helpful throughout the semester.
- honestly so good at explaining everything and super patient and overall one of the best TAs ever. u rock ur gonna do great things after u graduate in the fall good luck
- Really helped fill the gaps that were there.
- Great job! Very helpful. Maybe having a few more office hours would make it perfect, but I understand that you have enough on your plate. It's just that having office hours at the same time on MW or TR might mean trouble for some students.

Lead Teaching Fellowship

The Lead Teaching Fellowship (LTF) program is a professional development opportunity for doctoral candidates interested in promoting furthering their pedagogical development. LTFs attend workshops and sponsor two teaching-related events in their home departments. My two workshops focused on active learning techniques that teaching assistants can integrate into their recitations plans and the ways in which mentoring students in research lab environments is a form of teaching.

Senior Lead Teaching Fellows (SLTFs) oversee and mentor a group of five LTFs). The LTFs I oversaw were paired with me due to our common interest in changing cultures in teaching. SLTFs also continue to develop their own knowledge of pedagogy by creating a learning community: three workshops devoted to a single topic. The focus on my learning community is metacognition, thinking about one's own thinking. The three workshops cover (1) literature surrounding the benefits of metacognitive practices in the classroom, (2) in-class techniques and assignments which promote metacognitive thinking, and (3) ways of projecting our thoughts on teaching into our web presence and teaching statements.

For more information on the Lead Teaching Fellowship, follow the link <u>here</u>.

Innovative Teaching Summer Institute

For more information on the Innovative Teaching Summer Institute, follow the link here.

Teaching Development Program

For more information on the Teaching Development Program, follow the link here.

Pedagogy Workshop Participation

Participation in myriad pedagogy-focused workshops, hosted by Columbia's Center for Teaching & Learning and the School of Engineering and Applied Science, totalling over 100 hours of training. Topics covered include active learning techniques, backwards design of assignments, engaging with international students, inclusivity in teaching, metacognition, menetorship as teaching, and the scholarship of teaching, to name a few.

SECTION 6

Awards and Recognition

Oscar and Verna Byron Fellowship

Spring 2018

Given to a teaching assistant in the School of Engineering & Applied Science based on academic achievement and clear potential for future success.