Teaching

I believe that any philosophy course worth its salt should do two things: get students to discover how they think and get them to empathize with how others think. A great way to do both of those things is to encourage students to get their hands dirty with ideas. My courses are designed to support students as they dive into the (conceptual) mud—to showcase the joy of creating theories, to validate students' diverse needs and interests, and to instill mutual respect.

My break-out activities and essay prompts capture the joy of creative engagement with philosophical ideas in bite-sized chunks. One of my favorite break-out activities is "Make a Representation": in my Philosophy of Science class, I instruct students to draw on their personal interests to illustrate how representations distort the systems that they describe. Examples have ranged from representing humans as perfectly rational agents in economic models to representing a DNA strand as a stack of pancakes; the variety helps everyone in the class more deeply engage with the concept. I plan to include similar activities in my introduction to philosophy and epistemology courses, including the one where I instruct students to attempt to suspend judgment about the first claim that pops into their head ("Who wants to be a Pyrrhonian?"). In my [redacted] class, one of my essay prompts has students play the role of detective Hercules Poirot in solving the case of dead quantum cats. While Poirot bragged of his nuanced consideration of the probabilities, his clients remained puzzled about what those probabilities really were. This prompt gave my students a specific setting where they could tackle an abstract problem (the interpretation of probabilities in quantum mechanics) in a concrete way—all while cracking jokes about the little grey cells. I was thrilled to see my students play within this fanciful setting to develop mastery of difficult material.

I offer different methods of engagement to accommodate students' diverse needs and affirm their interests. On the one hand, students who excel with the material have the option to replace my long-form essay prompts with their own. One student with a strong interest in general philosophy of science, for example, took advantage of this option to write a research paper critiquing linguistic approaches to explanation; I helped them prepare that paper for submission to journals. On the other hand, each of my prompts comes with an optional template that guides students in structuring a complete and thorough response, and I provide additional support for those who do not speak English as their first language. I am particularly passionate about creating and using audio-visual media that illustrate nuanced concepts in accessible ways. My animation of Mars's retrograde modeled in Copernican and Ptolemaic cosmologies, for example, helps students to see the rough empirical equivalence of the two. I am also currently developing a Video Games and Philosophy course that uses games to exemplify and explore introductory philosophical concepts. Students will put Derek Parfit's thoughts about personal identity to the test by deciding the fate of their own clone in *Soma*. They will read Thomas Kuhn's classic descriptions of paradigm shifts in the history of science—and then experience one for themselves by playing *The Witness*. By having students (literally!) play out famous thought experiments, games present a unique and under-utilized opportunity for engaging students at all levels of preparation.

To instill respect in differing viewpoints, I ensure that students have multiple venues for sustained and empathetic discussion. Student polls allow me to identify and support minority views. At Notre Dame, for example, an early poll showed that the majority of my (mostly-theistic) class felt sympathy for scientific anti-realism (the disbelief of unobservable entities posited by science), allowing me to ensure that students with minority views (e.g., a belief in unobservables, or a more radical Kuhnian perspective) had their voices heard. The composition of break-out groups is randomized to help ensure that everyone chats face-to-face with a student who has a differing perspective—and I manage course blogs so that students can easily continue these discussions outside the classroom. To encourage deeper engagement, I have students review some of their peers' (previously-graded) work and provide their own feedback.

I am also excited to continue mentoring highly-motivated students at both the undergraduate and graduate level. Through the University of [redacted]s [redacted], I have had the pleasure of helping students working in physics and mathematics with technical problems relevant to cutting-edge research in the philosophy of physics. I will continue mentoring graduate students through my current [redacted]-funded projects. I am eager to carry this experience forward, to support each student who takes one of my courses on their unique philosophical journey.

Courses offered

I can teach the following undergraduate courses with a high level of expertise; an asterisk (*) indicates that I also offer a graduate-level course.

- Introduction to Philosophy
- Philosophy and Cosmology
- Introduction to Philosophy of Science* *(syllabus attached)*
- Introduction to Philosophy of Physics
- Philosophy of Quantum Theory* *(syllabus attached)*
- Introductory Logic
- Philosophy of Logic
- Philosophy of Probability*
- Formal Epistemology*
- General Epistemology

Syllabi not attached are available upon request.

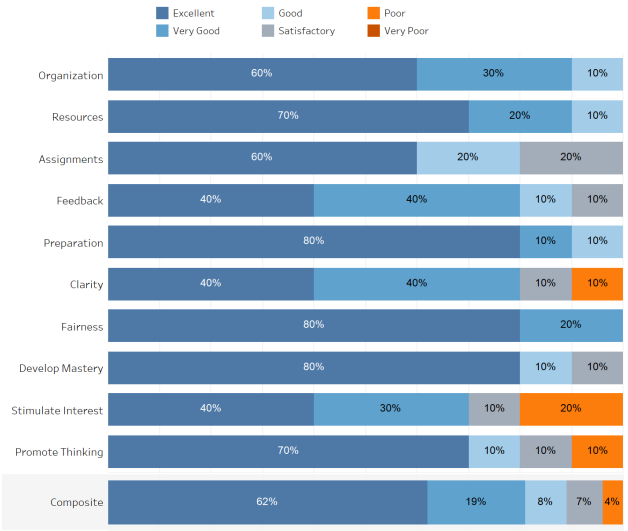
Evidence of teaching effectiveness

In Fall 2017, I taught Introduction to Philosophy of Science as my first course as an instructor of record. Below are my students' evaluations of this course from [redacted] system.

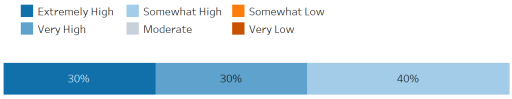
Class Report - Fall 2017 - PHIL 20617-01 - [redacted]

Course	Sub Numb Sec	Division	Department	Course Level	Location	Enrollment	Respondents	Response Rate %	Modal Credit Hours	Team Taught?
Philosophy of Science	PHIL 20617-01	Humanities	Philosophy	2	M	16	10	62.5	2.5 to 3	Single instructor

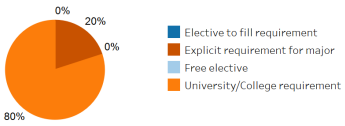
Percent Response Distribution



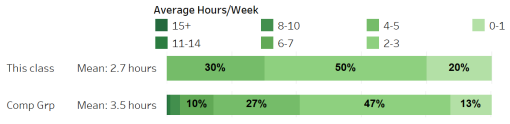
Intellectual Challenge



Students Taking Class as



Time Outside Class



Comp Grp: Classes at the same level in the same division with the same number of credit hours.

Composite Summary

4.7	81	4	100
Median	% V Good or Excellent	% V Poor or Poor	Item Responses

Quality of Student Effort *(Summer 2018 and later)*

Comp Grp: Classes at the same level in the same division with the same number of credit hours.

Below, I have included some of my students' anonymous comments from that system:

- [redacted]

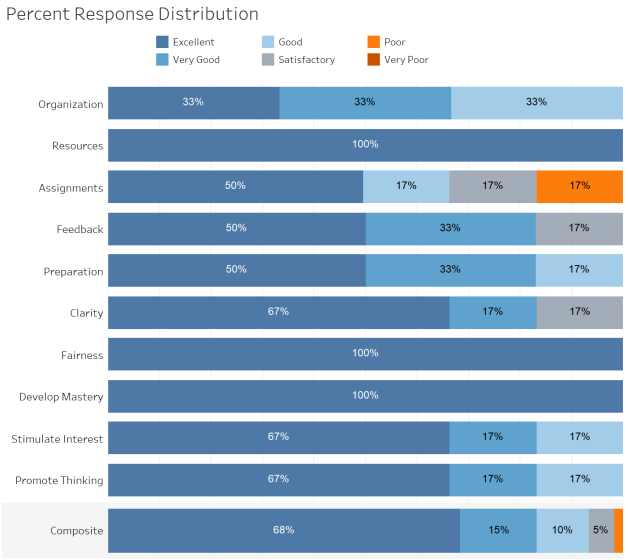
[redacted]"

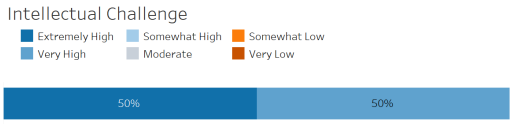
I was pleased to see that my students responded strongly to the class blog and the break-out discussions. These were two of my favorite teaching tools to use, and I plan to carry them forward into future courses. My weakest scores concerned stimulating student interest and promoting thinking. To address this, I experimented with more interactive activities in my [redacted] course. These including long-form class discussions and essay prompts that involved elements of creative writing.

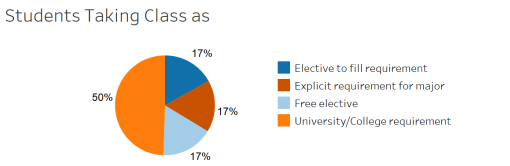
In Spring 2019, I taught Topics in Philosophy of Physics: [redacted] as my second course as instructor of record. Below are my students' evaluations of this course from [redacted] system.

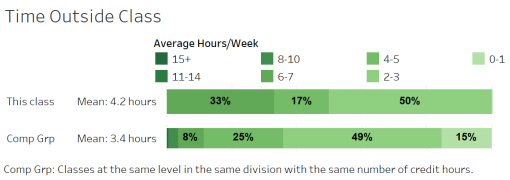
Class Report - Spring 2019 - PHIL 20648-01 - [redacted]

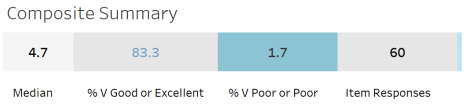
Course	Sub Numb Sec	Division	Department	Course Level	Location	Enrollment	Respondents	Response Rate %	Modal Credit Hours	Team Taught?
Topics in Phil. of Physics	PHIL 20648-01	Humanities	Philosophy	2	M	6	6	100	2.5 to 3	Single instructor

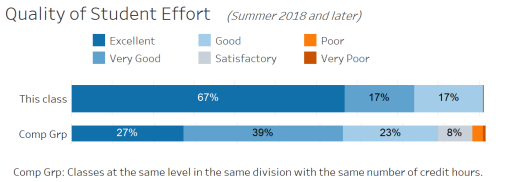












Below, I have included some of my students' anonymous comments from that system:

- "[redacted]"
- [redacted]
- [redacted]"
- [redacted]

I was very excited to teach this course, and I was thrilled by how engaged my students were with the

material. I was also very happy to see that my students responded well to the long-form class discussions and creative writing prompts, and that my scores in student interest and promotion of thinking improved accordingly. My weakest score concerned the assignments, which were occasionally too difficult and too technical. To address this, I plan to restructure how readings and problem sets are handled. I will pare back the amount of reading by requiring only certain sections of the main texts, and I will re-do the portions of the problem sets that require excessive computational work.

In Spring 2020, I again taught Introduction to Philosophy of Science, this time taking the course entirely online due to the COVID-19 pandemic. I took this opportunity to develop an array of online teaching tools, including a library of prerecorded lectures for asynchronous study. I received a composite median of 4.7 (out of 5) in student evaluations; a full report from the [redacted] is available upon request.

Below, I have included some of my students' anonymous comments from that system:

- [redacted]
- [redacted]
- [redacted]

Syllabi

For reference, I have attached as separate documents my syllabus for my 2020 "Philosophy of Science" course and that for my 2019 [redacted] course.