Letter from the Editor-in-Chief:
How Long Does It Take to Prepare for Class?

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A potential hurricane threat, enough to cause the local symphony to turn away Shostakovich, Rachmaninoff, and Tchaikovsky, ended up canceling class and thwarting a well thought out schedule. On top of that, the 2015 Nobel Prize in Physics was announced and the topic was neutrino oscillations, which could be explained only using quantum mechanics, the subject of my class. That turned out to be a double whammy and needed some serious thought as to how I had to recover the momentum of the class. Do not worry, I am not going to derive neutrino oscillations or write down one equation, but this is pertinent to the topic I have been pondering for a while – how long does it take to prepare for a class?

In this case, it would usually take me a little time to prepare. After my last class I usually go back to the office and write down a quick review of the important things we had covered and write down a few ideas as to what the next class would entail. If the subject is not fresh, I might ponder the subject for two days, look up some material, or history, and sometimes go to the library. I might do some computations or write up summary notes for future use. Students often stop by with homework questions, which could then suggest topics that need attention in class.

However, on this date, I was beset with a new problem – physics in the news. I watched the live broadcast of the Nobel Prize announcement and knew I had to be prepared to explain the physics in my next class (at 8:00 A.M. the next morning) and relate it to what we had spent the last half of the semester learning in class. After some Internet searches and a trip – on foot – to the library, I then found myself in a two hour meeting deriving the needed results and thinking about the appropriate pedagogical response while listening to the Chancellor and Provost discussing recent changes at the University. By the end of the meeting, with ears perked to university business, I hit upon the right approach and details that were to end up in 45 minutes of the 75 minute class the next day. It would take more time to smooth out the discussion and derivation and, in the end, the class came off as one of the most relevant and coherent classes I had ever prepared and which the students had appreciated. Of course, the few hours of preparation built on years of preparation from undergraduate training, graduate school, and a quarter century of teaching students at all levels.

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This is what it takes to prepare for one class while dealing with other classes, meetings, running committees, and editing this journal. It is no different for countless other instructors, except they are at different stages in their careers with multiple other challenges. So, I return to my main question. How long does it typically take an instructor to prepare for a class?

My teaching philosophy, as espoused twenty years ago, was that “Learning takes place outside of the classroom.” At least that is the hope – that student learning should not be expected to be just from interactions during three fifty minute periods of time each week, but they should be challenged to study and engage with the material and their instructors outside of the classroom. Recent studies have indicated that while it is recommended that students spend 2-3 hours studying for each hour of class time, students today only study on average about one hour for each hour in class.

Faculty also spend time outside of each class in preparation, advising, working with students, and grading papers. However, I do not recall ever having a discussion with other faculty about the typical amount of time that one should prepare for classes or how long it takes to write and exam. It is probably obvious that one tends to spend a lot more time on new preparations, revamping old courses, or introducing new material in a course. But, how much time is needed to prepare courses? Is there a rule of thumb for this?

Then, there is the notion that one eventually realizes that the goal is student learning as opposed to the perfect lecture or class delivery. Even then, one needs to have a loose plan. Consider the learning outcomes and how they might be met over the course of the semester. One needs to plan on delivery method, assignments, readings, and discussions. Leave room for unexpected questions. Depending on the level, depth, and possible new topics dreamed up, my preparation can take anywhere from fifteen minutes to several days of preparation for one class or even a small part of the class. Of course, there is grading and writing exams, which alone can take several days, on top of the preparation before the class. Is this typical?

There is little literature about how long one should spend preparing for classes and exams. However, new instructors might benefit from knowing what others do. The Center for Teaching Excellence at the University of Waterloo lists best practices for course preparation. This includes ideas on preparation, lecture notes, structure, engaging students, delivery, and using visual aids. Although, there is nothing about how long these activities should take to prepare; how preparation time varies with disciplines; or, how much longer it takes to plan a well-thought out set of student activities anticipating the variations that students might introduce to the learning environment.

Lantsoght (2013) discusses the experience of a new faculty member who spent 30 hours on the first lecture! Obviously, this is a bit long. She noted that the American Faculty Association (2012) blog suggests a rule of thumb of 2-4 hours of preparation time for every hour of class time. The higher figure is for new classes. This site includes links to other university guidelines. After some deliberation and reading other thoughts on the subject, Lantsoght (2013) had decided to break down the time for new courses as follows:
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- 45 minutes to read the class material
- 45 minutes to distill all important information
- 15 minutes to outline the class hour
- 45 minutes to construct the argument around the "what if" question
- 45 minutes to prepare an example and possible homework
- 45 minutes right before class to make some slides with figures that are complicated to draw on the blackboard, or pictures from practice, and to revise all material.

Felder, R. M., & Brent, R. (2007) discuss the preparation for new courses. They provide a short list of how to prepare for classes including talking to colleagues, minimizing new preps, and limiting number of new preparations. On the other hand, Wankat, P., & Orevicz, F. (2000) indicate that too much time preparing is overdoing it. They suggest how one can break the preparation time into small chunks amounting to less that a couple of hours preparation per lecture.

Cavanaugh (2005) discuss the amount of time needed for online instruction. He notes that time for online instruction results in heavier workloads, noting that Hartman, Dziuban, and Moskal (2000) had “surveyed 32 online instructors and found that 90% of the instructors believe online courses were more difficult to teach.” Cavanaugh (2005) further describes how the development of courses, answering emails, extra time at home, and other activities results in needing about nine times the amount of time per student as traditional instruction.

Of course, faculty have other activities that add to the workload. Some of this was discussed in a previous Letter to the Editor in this journal. [See Herman (2013).] Ziker (2014) discusses faculty workload and what faculty actually do. Ziker (2014) notes that “23 percent of their time on class preparation, 13 percent on course administration, 10 percent of their time on email, nine percent of their time at workshops/conferences, eight percent of their time in professional conversations, seven percent of their time on professional travel, four percent of their time on manuscript writing, and four percent of their time on what we termed housekeeping” Furthermore, “On average, our faculty participants worked 61 hours per week.” So, it is advantageous to figure out what is a reasonable time for course preparation and there should be more discussion about best practices for faculty course preparation in light of the current atmosphere of adding more assessment and student engagement in our curriculum.

References

American Faculty Association (2012) Hours for Teaching and Preparation Rule of Thumb: 2-4 Hours of Prep for 1 Hour of Class
http://americanfacultyassociation.blogspot.com/2012/02/hours-for-teaching-and-preparation-rule.html

Center for Teaching Excellence, University of Waterloo, Lecturing Effectively, Retrieved Sep 12.