Estimation of Out-of-Class Time Expected for Students to Complete Assignments, Exams, and Preparation

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Introduction

The rule of thumb is that students should plan to spend 2 hours studying outside of class for each credit hour.[1] However, this "rule" may not be accurate with the current pharmacy curriculum. In addition, recent concerns about amount of time spent on class activities/assignments outside of class have been raised. Because of the impact on student stress and well-being, an inquiry into out-of-class time needed to complete course activities was conducted.

Objective

To evaluate estimated hours of assigned, required activities students are expected to complete outside of class for each didactic course in the P1-P3 years.

Methods

AY 21-22 syllabi from required pharmacy courses (P1, P2, and P3 years) were reviewed for student work expected outside of normal class times. For each activity (e.g., assignments, exams, readings), time needed to complete each was estimated based on the authors' knowledge of course activities and set by consensus; conservative estimates were used (see box below for examples). Results were summarized with descriptive statistics.

Time Estimations used for evaluation:

Exams = 2 hours
Readings = 5 minutes per page
Exam Prep = 2 hours per credit hour for each exam
Integrated Studies course preparation:
- P1 = 0.5 hours/week
- P2 = 1 hour/week
- P3 = 1 hour/week

Laboratory course preparation:
- P1 = 0.5 hours/week
- P2 = 0.5 hours/week
- P3 = 1 hour/week

Papers = 2 hours for most papers;
- 5 hours for P2 PHAR 463 paper;
- 8 hours for longer paper in P3 PHAR 550 class

Projects in PHAR 506 = 4 hours/project
Development of slide presentation = 2 hours

References

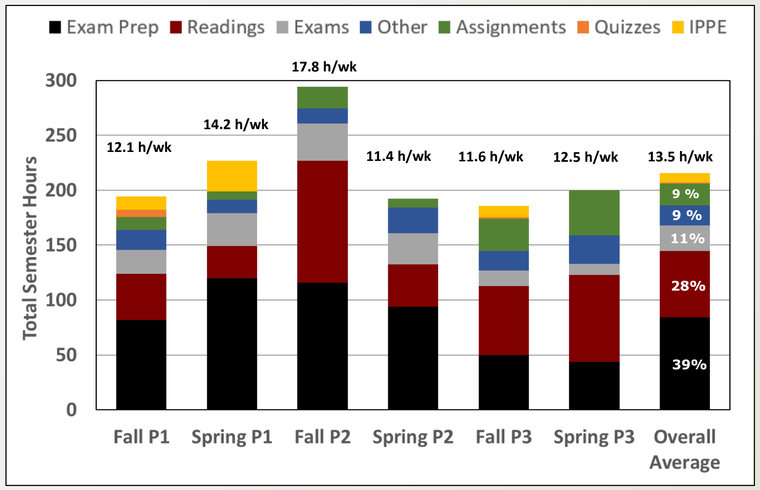
1. Paff L. Questioning the two-hour rule for studying (8/28/2017). Faculty Focus website. Accessed May 9, 2023. https://www.facultyfocus.com/articles/teaching-and-learning/questioning-two-hour-rule-studying/

Results

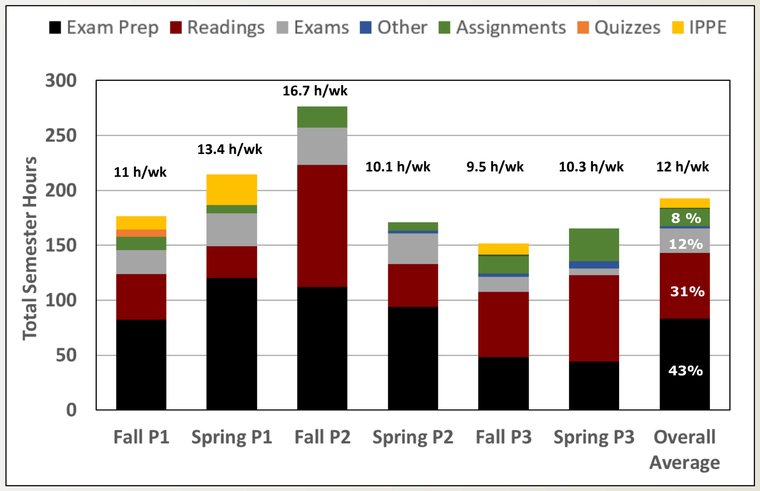
P1-P3 Credit Hours per 16-wk Semester by Course Type (AY21-22)

P1 Fall		P2 Fall		P3 Fall	
Lecture	13	Lecture	13	Lecture	12
Lab	2	Lab	1	Lab	1
Integrated Studies	1	Integrated Studies	1	Integrated Studies	1
P1 Spring		**P2 Spring**		**P3 Spring**	
Lecture	15	Lecture	12	Lecture	13
Lab	1	Lab	1	Lab	1
Integrated Studies	1	Integrated Studies	1	Integrated Studies	1

Estimated Total & Average Weekly Hours for Out-Of-Class Coursework for All P1-P3 Courses by Semester (AY 21-22)

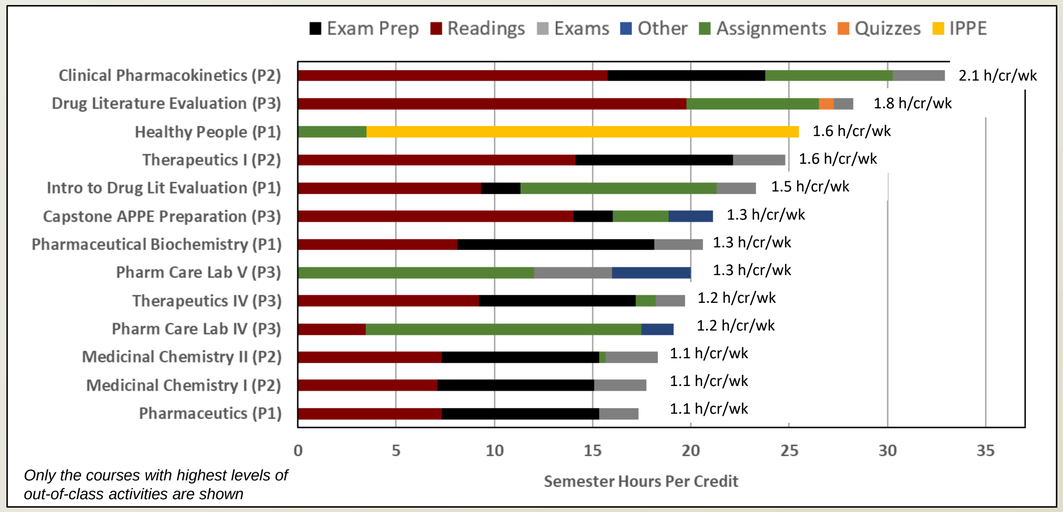


Estimated Total & Average Weekly Hours for Out-Of-Class Coursework for P1-P3 Lecture Courses by Semester (AY 21-22)



- *Weekly averages based on a 16 week semester.*
- *Other category includes preparation for laboratory courses, integrated studies, viewing prerecorded videos, completion of internet modules and certification programs*

Estimated Total Time per Credit Hour Spent on Out-Of-Class Coursework During a Semester (AY 21-22)



Only the courses with highest levels of out-of-class activities are shown

- Highest total weekly hour expectation per course was in P1 Biochemistry (5.2 h/wk) and P2 Pharmacokinetics (6.2 h/wk).

Discussion & Conclusions

These results indicate the varying levels and types of expectations across different courses.

- Lecture courses had the most hours of out-of-class activities which were mainly exam prep followed by pre-lecture readings and out-of-class exams. Exams are the primary assessment method used in most courses.
- Lab courses had higher levels of assignment hours. Lab assignments are used for preparation for the lab and are usually completed prior to the lab period.
- Small group discussion (Integrated Studies) and lab courses had similar preparation hours.

Potential Limitations:

- Times were estimated by authors; the amount of time may have over- or underestimated.
- Only course syllabi were used to identify activities/assignments, which may not include all required coursework especially if syllabi were modified during semester or information was only placed on learning platform (i.e., Moodle)
- Only required P1-P3 pharmacy courses were included; time estimates for students taking electives, pursuing dual degrees, or splitting years would presumably vary from the results.

Conclusions:

- Although these results likely underestimate the total hours of assigned out-of-class work, they still indicate the varying levels and types of expectations faculty have across different courses. These results raise new questions about whether course instructors are competing for student time outside of the classroom, whether the workload level for out-of-class work is appropriate across the curriculum, and whether students actually spend that much time on the assigned activities.
- For most courses, students are expected to spend less than two hours per credit hour outside of class time based on our conservative estimates.

Disclosure statement: None of the authors have anything to disclose.

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