

Updating and Improving the Capstone Course Experience for Learners and Teachers

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Background

The Capstone course is a required four-year course which aims to support students in the execution of a longitudinal scholarly project. The Capstone course meets criteria for “underperforming” (<75% approval) designation in two areas:

Overall, how would you rate this course?	2.52/4	52.77%
Feedback on reports supported progress/learning	2.95/4	74.07%

The medical school curriculum is currently being updated, which presents an opportunity to improve the Capstone course.

Objectives

- 1) Identify student and faculty concerns about the Capstone course
- 2) Propose potential changes to the Capstone course to address the most significant concerns
- 3) Measure student approval towards these proposed changes
- 4) Summarize and present the most highly student-approved proposed changes to Capstone Course Leadership Team.

Methods

- I reviewed 378 Capstone oasis evaluations from the 2020-2021 Academic Year.
- I also created a pre-survey to assess unclear aspects of Capstone and top barriers to meeting deadlines.
- I identified the most significant concerns and generated 22 proposed changes to address these concerns.
- Students voted on these proposed changes, and whether they addressed unclear aspects of Capstone and barriers to meeting deadlines, on a post-survey.

Results

- Between the pre- and post-surveys, the average % of students finding aspects of Capstone “unclear” decreased by **26.1%**, and the average % of students rating certain barriers as significant for meeting Capstone deadlines decreased by **15.5%**.
- **15 out of 22** of the proposed changes gained >50% approval on the post-survey. These are listed in the table below. Proposed changes that did not meet this threshold were omitted.

Concern	Proposed Solution	% agree
Project selection	1a) Create research project database	84.6
	1b) Create roster of past highly-rated advisors (based on oasis evaluations)	70.8
	1d) MS1 Capstone curriculum focused on developing research skills	72.3
	1e) Affiliate must give feedback on project feasibility within a month of project proposal	61.5
	Medical school support for project	2a) Add additional, optional Capstone poster presentation session before ERAS deadline
Reports and Timeline of Deadlines	2b) Optional workshops (or asynchronous videos) on common issues	52.3
	3a) In place of report submissions, create a live document that can be accessed by affiliate and mentor	63.1
	3b) Flexible format with no length requirement	86.2
	3c) Rework deadlines to avoid exam dates, Step 1 period, holidays, and flexible range of deadlines provided during clinical rotations	96.9
	3d) Timeline of deadlines given to affiliates and mentors, with exam dates and Step 1 period marked on timeline	82.8
	3e) No punishment for those who get their work done early	95.3
Variation in Capstone experiences	3f) Meeting with affiliate can substitute for an update with affiliate approval	70.3
	4a) Projects that take place over >1 month should be accepted as “longitudinal” and all affiliates should be on the same page.	81.5
Overall Capstone reputation	4a) Projects that take place over >1 month should be accepted as “longitudinal” and all affiliates should be on the same page.	81.5
	5a) Students may submit outside project to their affiliate to be approved for Capstone credit as long as they worked on this project during med school	87.7
	5c) Website should be simplified	78.1

Conclusions

- Students enter medical school with differing levels of experience in conducting research, and the current Capstone course does not provide the resources needed to accommodate student needs.
- Solutions have been identified which are popular amongst students and address unclear aspects of the Capstone course and top barriers to meeting deadlines.
- Future goals include incorporating these proposed changes to the Capstone course.

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