Hamed Youssefpour named instructor of the month

When the pandemic struck, Youssefpour pivoted his teaching abruptly — and successfully — to the online realm.

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Lucas Joel



"Many of the lessons that we learned from developing the online courses may be applied to in-person classes once the pandemic ends," Youssefpour said. "I have always been wanting to work on extra problems for my students — but the limited class time and lack of familiarity with technology prevented me from doing so when we had regular classes."

Picture Credit:

Mark Jordan Photography

Last year, as most know, everything changed. At UCI, what was once a place here hundreds of students hurried to and from class became a place where you heard only your own footsteps and maybe those of the one other person on the other side of Aldrich Park. Lecturers like Hamed Youssefpour of the Department of Mathematics faced a problem: those hundreds of students were still students enrolled in courses that needed to move entirely into the online realm. It was an unfamiliar realm, but now, one year on, Youssefpour thinks the experience and the lessons he learned from it only stand to aid his teaching as the pandemic ends and classes move back to in-person classrooms. The Physical Sciences Office of Communications caught up with Youssefpour to hear about his pivot, which in March earned him the School of Physical Sciences' Instructor of the Month award.

This interview's been edited for brevity and clarity.

LJ: So, what do you do at UCI?

HY: About eight years ago, I received my Ph.D. on the mathematical modeling of tumor growth under <u>Professor John Lownegrub</u>. My area of research was mathematical biology — but nowadays I'm more focused on teaching. I love to teach mathematics. It's very rewarding when I present a complex and abstract mathematical topic with simple examples in a way that students understand. It gives me a lot of energy seeing them satisfied about the knowledge that they acquire.

LJ: Tell me about your experience transferring you class online.

HY: Last year, the shift to remote teaching was quite abrupt. All of a sudden, we had to switch to remote teaching at the end of the winter quarter. But by the time the math department decided to offer four of our major courses online, which serve thousands of students every year, it was already summer and we had the experience of teaching online and remote classes in spring. Lessons that we learned during the spring quarter proved invaluable and helped us successfully develop the online courses. When the decision to create the online courses was made, we went through a lot of brainstorming amongst the instructors who had the task of developing these four online courses, all the way down to how the topics should be presented to the students, how the course Canvas page should look, and what types of assignments should be given to students along with many other details.

The main reason we succeeded in developing these online courses was the close cooperation that the course instructors had together. Additionally, the math department, School of Physical Sciences, and DTEI (Division of Teaching Excellence and Innovation), and many others, were extremely helpful, providing us with the necessary resources. The success of these online courses is the result of collaborative efforts of many people.

LJ: What challenges did you face?

HY: The first thing that comes to my mind is the amount of time that it took me to develop the Math 2A online course. The process took a lot more time than I initially thought. Breaking each section of the book into smaller sub-sections without losing the natural flow of the topic, picking the problems and materials that go into the videos, typing the blank lecture notes, and creating videos were very time consuming. Not to mention that since I was not editing the videos, every time that something went wrong or I made a mistake, I had to start over and record the video from the beginning.

Although the task was very challenging, I believe we were successful in reaching the goal that we envisioned from the beginning. A lot of students have had a pleasant experience in these online courses. They can watch the videos as many times as they need to, whenever they want to. Students learn at different pace. Just the fact that no student feels that he or she is left behind is a great success.

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