Dr. Jennifer Musa and Melissa Glenn, Professors of Biology

What do you like most about online teaching?

MG: My favorite part about online teaching is being part of the college's mission to provide flexible learning opportunities. I have seen first-hand how online courses have allowed students to balance their academic goals with the demands of employment and family needs. I regularly teach students from across the state, and even sometimes students from across the country.

JM: My favorite part of online teaching is being able to provide students who cannot come to campus for traditional classes the opportunity to further their education. I have also enjoyed the challenge of rethinking how I teach and the chance to collaborate in new ways with my colleagues.

What have been some of the challenges?

MG: Unlike working with students in person, there can be a communication barrier since the students are not meeting regularly with me. I always enjoy talking to my online students in person or on the phone because the students feel as if I am a real person who is there to support them. There are additional challenges in the online environment due to requirements necessary to authenticate student identity and to monitor academic honesty.

JM: Online teaching is definitely a challenge. Without the day-to-day in person interaction with students, you have to be creative about ways of engaging and interacting with them. Also, I would never give an "open book" test in my on campus class and it has been difficult to find ways to preserve the same kind of academic integrity with online exams. In the Biology Department we have started using the Examity remote proctoring service for our online Anatomy and Physiology lecture exams. Although we saw an initial drop in student performance, over time we have seen a steady improvement in exam scores.

What are you doing/doing differently that makes your course interesting or unique?

MG: I have had to research and test innovative ways to complete laboratories in the online environment. The resources available for virtual laboratories have improved dramatically since I started teaching those labs 10 years ago. Now students can set up experiments and test their own hypothesis in the virtual laboratory while manipulating virtual pipettes, microscopes, and analytical equipment. Many students comment that the virtual laboratory was their favorite part of the course! This also has increased access for students who are intimidated by traditional laboratories or may have some disability that makes the online environment a better fit.

JM: I post announcements at least twice a week to help students stay on track. I always try to include relevant and engaging pictures with each announcement and give students some study tips and practice questions. Also, Melissa Glenn and I have worked very closely to completely rethink the course schedule and delivery for our online classes. Although we have both taught Anatomy and Physiology I and II on campus for many years and have often shared strategies and materials and advice, we have taken our collaboration to a new level with our online courses - and we feel that it has been very beneficial for our students. We have worked to

coordinate the format and policies of our courses. This has helped students to have a seamless transition if they change instructors between Anatomy and Physiology I and Anatomy and Physiology II. In addition, given all of the technological challenges that students face in an online class, we think that keeping the format as streamlined as possible helps them to focus the majority of their time and attention on learning the course content.

What would you say to a student who is considering online learning?

MG: Because I have taken online courses myself, I always tell students that they must have strong time management skills and be prepared to work independently. Procrastination will make it very difficult to complete the material before the due date or to be able to have enough time to reach out for help if they need it.

JM: If you do not have excellent time management skills, online learning might not be for you. Also, you need to have the appropriate hardware and software for an online class. Just like when you take a class on campus you are expected to have transportation to get to campus, if you take an online class you need to have the appropriate equipment to access your course.

What would you say to a colleague who is considering redeveloping a course for the online platform?

MG: The best advice is to utilize the many resources we have both on the campus level and within your particular discipline. There are numerous conferences and training courses that can assist you in the design of your course. I have been lucky enough to work with a number of excellent colleagues who can review and provide feedback on my courses. It is so helpful to collaborate with others so that the students can benefit from a consistent experience, particularly in the two semester biology courses that we teach. I have learned more from regular interaction with my colleagues than I have from graduate courses that cover distance learning!

JM: Have an open mind and expect to spend more time on your course than you might with a traditional face to face class. Expect that you can maintain the same academic standards that you use on campus, but you may have to find new ways to teach and assess learners. Consider collaborating with colleagues in new ways, and take the time to get to know your online students. Offering a class online does not mean that you have to sacrifice the personal relationships that make teaching so rewarding!