Florida Atlantic University’s Charles E. Schmidt College of Medicine is one of the newest independent medical schools in the United States, having welcomed its first class of students in 2011. Building off FAU’s longstanding history of biomedical research, the school aims to enable its students to become active, self-directed, lifelong learners. The class size is 64 students per year.

Why HMX for FAU?

FAU admits a diverse class of medical students, with a significant range of academic backgrounds. The school viewed HMX material as a way to “level the playing field” with online lessons delivered before students set foot on campus.

“HMX filled an important gap for us because it allowed all of our students to come in ready to learn all the upper-level science that we were expecting of them,” says Sarah Wood, FAU senior associate dean for medical education.

FAU first partnered with Harvard Medical School in 2016 to provide HMX Immunology to its incoming class of 64 medical students.

“We had previously identified immunology as a subject with which our students struggled considerably during their first semester of medical school, says Michelle Lizotte-Woniewski, FAU associate professor of integrated medical science and the director of student wellness and support. “Before HMX we were having our incoming students utilize an immunology book to learn the basics of immunology before arriving on campus.”

FAU students took the HMX Immunology course during the summer before their first year, with a member of the school’s immunology faculty acting as a facilitator answering questions on the course discussion forums. Students then took HMX Physiology the following summer, as rising second-years. FAU sends messages about the courses to students shortly after they are admitted to the university (or after their first year), and the courses run for 10 weeks during the summer.

“One of the things I find so exciting about HMX is that not only does it deliver content, but it also does it using cognitive science principles of learning,” says Wood. “Our job is to teach the students, but HMX really gets at how students learn. That is what makes it so unique.”

The school has continued to offer HMX Immunology to pre-matriculation students. As of 2018, rising second-years will begin taking HMX Pharmacology during the summer.

FAU’s Approach

“Having high-quality, innovative, engaging material to get students knowledgeable and excited about medical school has been a huge benefit for us in our curriculum.”

Sarah Wood
Senior Associate Dean for Medical Education
Program Results

Based on matched pre-course and post-course quizzes given to participating FAU students, HMX found significant student learning gains upon course completion. This finding was consistent, regardless of students’ prior level of subject matter knowledge. HMX provided FAU leadership with reports outlining learning gains, students’ engagement and performance in the courses, as well as how well students felt the courses helped them learn the material.

“Our students reported consistently that the HMX modules took difficult-to-explain concepts and really made them easy to understand,” says Wood. “Even months after they’d done the modules, they could remember the cases vividly and recall the important points they had learned. Whether in [problem-based learning], in small group learning, or in any of the simulation cases, the students would all look back at the cases they had done in HMX and use it as a discussion point...As we threw more challenging coursework at them, they had the foundation so that they could really engage and feel confident in their basic science knowledge.”

“With the advent of our adoption of the HMX modules we have seen a marked improvement in how well the students score on the immunology portions of the first basic science assessments,” adds Lizotte-Woniewski.

Student Feedback

“The videos with patient interactions are not only informative with regards to the condition, but demonstrate effective doctor-patient communications.”
— FAU Student

“I enjoyed the animations the best. They really allowed me to visualize the lessons more easily and gave me pictures that I could remember as opposed to facts I might forget.”
— FAU Student

“I thought the course was put together in a way that made a lot more sense to me than just a simple PowerPoint lecture.”
— FAU Student

“The interactive review tied all of the lessons together, and made it easier to understand the big picture.”
— FAU Student