

How California Northstate University, College of Dental Medicine partners with Complete Anatomy, providing access to a virtual dissection lab and boosting student engagement in class

“Each student gets their own ‘cadaver’ that they can dissect on their own and personalize to their learning style. That’s not always present in the physical anatomy lab.”

- Karisa Yamamoto, DDS

Course Director



Health

Complete Anatomy +



The Program

California Northstate University (CNU), College of Dental Medicine welcomed its inaugural class in 2022, driven by a mission to enhance oral health in Northern California and beyond. The program was designed to implement a flipped classroom and hybrid learning environment, aligning with their humanistic education model. CNU's focus on personalized learning and maintaining a high faculty-student ratio helps ensure individual student needs are met and there are ample opportunities for one-on-one interactions.

Challenge One

Providing students with access to an engaging, high-quality, and accurate 3D virtual dissection lab.

Recognizing the limitations and risks of in-person cadaver labs, CNU College of Dental Medicine sought innovative solutions to provide each student with a deep understanding of relevant human anatomy.

The Solution

CNU College of Dental Medicine integrated Complete Anatomy into their curriculum as a beneficial alternative to an in-person dissection lab. Complete Anatomy's dissection lab not only ensured continuity in education for virtual and hybrid classrooms, but also provided a scalable and inclusive approach that could be integrated into the university's long-term curriculum strategy, catering to diverse learning needs and circumstances.

The Result

Even as in-person labs became an option again, CNU College of Dental Medicine made the decision to continue their partnership with Complete Anatomy instead of switching to an in-person lab. Complete Anatomy was positively received by faculty and students and provided a unique opportunity for learning that in-person dissection labs could not. Traditional labs are not typically able to provide each student with one-on-one access to a cadaver. CNU Course Director, Dr. Karisa Yamamoto, studied and taught in dissection labs, and is familiar with their limitations, "With only one cadaver per group of four to six students, there is usually one or two people who are really [dissecting], and everyone else is kind of gathered around without access to that full, immersive experience." Complete Anatomy supports CNU's personalized learning goals by making sure "each student gets their own 'cadaver' that they can dissect on their own and personalize to their learning style," shares Dr. Yamamoto.

California Northstate University College of Dental Medicine

2007

The California Northstate University was founded.

2022

The California Northstate University, College of Dental Medicine welcomed their inaugural class of students.

2022

Institutional partnership with Complete Anatomy began.

Elsevier products used by program

Osmosis
Complete Anatomy



ELSEVIER

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Challenge Two

Providing students with learning resources they can access during in-class activities and guided dissections.

Dissection activities are vital for dental students as they provide experience and a deeper understanding of relevant human anatomy, bridging the gap between theoretical knowledge and practical application.

The Solution

Using Complete Anatomy, Dr. Yamamoto designed a virtual dissection lab manual that provided students with instructions for locating and dissecting anatomical features and reviewing essential terms and structures. This lab manual helps create more connections to the curriculum as they use Complete Anatomy during class activities and case-based discussions.

The Result

Dr. Yamamoto splits students up into small groups during in-class activities where they must use the virtual dissection lab manual as a guide. “Complete Anatomy has so many resources already preset,” explains Dr. Yamamoto. After giving her students a starting point, they each use their own virtual cadaver in Complete Anatomy to cut away structures or take away layers based on the assignments outline. “Students upload and submit their dissection for the session and then I grade them so I can track their work,” says Dr. Yamamoto.

In addition to dissection assignments, Dr. Yamamoto also pulls images from the platform to help build out assessments that match the activities they completed in class. Students also use Complete Anatomy to quiz themselves during their own time. “Once it’s time for our summative assessments, students use the program to create their own quizzes.” Additionally, students are given opportunities to conduct teach-backs in small groups. Students “use Complete Anatomy as a tool to teach each other. They’re able to create their own slides based off of their in-class work and then teach each other, which is really neat,” shares Dr. Yamamoto. “Students have said that Complete Anatomy is helpful. And we get very positive end of course evaluations for Complete Anatomy.”

Find out how **Complete Anatomy** can support your locally-created curriculums and flipped classrooms and help spot student learning gaps [here](#).