Success Story

Auburn University



Program in Use

Connect Microbiology with *Prescott's Principles of Microbiology* by Joanne Willey and Kathleen Sandman.

Challenge

Adapting to online learning and driving at scale.

Solution

Interactive Assignments, Smarter Learning, and Lab Readiness with Connect, SmartBook®, and McGraw Hill Virtual Labs.

Result

Higher engagement, more A's, and smoother course management.

> **Connect assignments allow for deeper engagement with course content and better student understanding."**
>
> – Dr. Rebecca Riggs



Dr. Rebecca Riggs

Department of Biological Sciences

The Challenge

When the pandemic forced a sudden shift to online learning, Dr. Rebecca Riggs, who teaches General Microbiology at Auburn University to an average of 275 students per section, needed a solution that could both support remote instruction and provide meaningful student engagement.

"I switched to Connect during the pandemic because I needed tools that would let students actively engage with the material," said Dr. Riggs. "The Connect platform allowed me to assign guided readings through SmartBook and interactive homework, which were sorely lacking in a previously used online platform."

Even as in-person classes returned, Dr. Riggs continued using Connect semester after semester due to the deeper comprehension it fostered. Her goals with Connect included:

- Increasing student understanding of core objectives with SmartBook and Connect homework.
- Improving exam preparation through Connect assignments.
- Supporting lab-based learning with Virtual Labs.

The Solution

Dr. Riggs implemented a robust strategy using McGraw Hill Connect to meet her goals. She emphasized the power of question variety in homework assignments, noting, "I appreciate the drag-and-drops and labeling questions, but my students love the animated videos and follow-up questions most."

SmartBook readings, initially optional, were so successful in improving quiz and exam scores that Dr. Riggs plans to make them a required part of the course moving forward. "SmartBook readings guide students through the core concepts and allow them to learn actively. They can even open the eBook mid-assignment and see what sections they need to revisit."

She also uses Connect Virtual Labs to bridge lecture and hands-on lab components. "Assigning the Gram stain lab before they perform it in person boosts their confidence and lab performance. The PCR lab lets them simulate experiments we can't offer in the actual lab."

> **“SmartBook readings and Virtual Labs directly support exam success and lab confidence.”**

Implementation

Course grade breakdown:

- 10% Connect Homework
- 10% Quizzes administered within Connect
- 10% In-Class Activities (often Virtual Labs)
- 10% Online Discussion (transitioning to SmartBook)
- 45% Exams
- 15% Final Exam

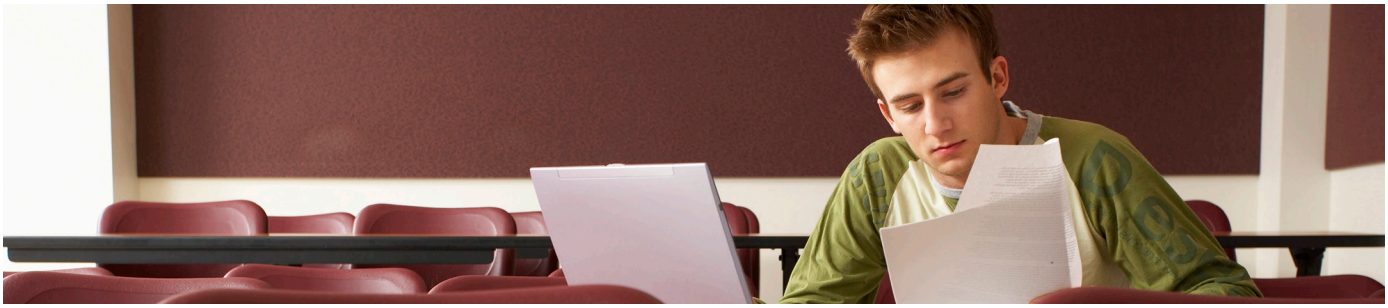
Assignments are tailored using the Connect Question Bank, filtered by Bloom's level and question type. Each SmartBook reading covers one chapter and takes about 30–45 minutes. Homework assignments average 15 questions. Virtual Labs are used weekly, either as pre-lab exercises or to simulate inaccessible experiments.

Inclusive Access

Inclusive Access makes Connect even more effective by reducing barriers to materials. "It simplifies everything," said Dr. Riggs. "Students have access from day one, and the seamless Canvas integration makes onboarding easy."

Students have praised the affordability and ease of Inclusive Access, and Dr. Riggs finds it equally beneficial for managing course setup.

> **“With Inclusive Access, students are ready on day one—no delays, no stress.”**



The Results

Using Connect has transformed Dr. Riggs' teaching efficiency and student outcomes. Preparation is streamlined with accessible instructor materials, visuals from the textbook, and active learning resources.

"Automatic grading saves so much time with large class sizes," she said. "The seamless Canvas sync is a huge plus."

Student participation has also improved. "Nearly the entire class completed SmartBook readings this semester, and I saw a noticeable jump in the number of As, Bs, and Cs."

While she doesn't yet have formal data, she sees a clear trend: students who engage with SmartBook and Connect assignments perform better on exams and are more prepared in lab.

> **“Connect has boosted exam performance and raised our overall grade distribution.”**

Conclusion

> **“The ease of set-up and range of tools in Connect let me tailor learning to exactly what my students need.”**

Connect has become an integral part of Dr. Riggs' course design at Auburn, improving not only student learning outcomes but also the ease of teaching a high-enrollment course.

"The ability to build customized assignments, explore the vast question bank, and engage students with interactive labs is my favorite part of using Connect," she said. "Start small, and each semester you'll discover new tools that enhance your course."

About Auburn University

Founded in 1856, Auburn University is a nationally ranked public institution located in Auburn, Alabama. Known for its commitment to academic excellence, research, and community engagement, Auburn serves more than 30,000 students across 150+ degree programs. The university fosters a collaborative and inclusive environment that prepares students for leadership roles in an ever-evolving global landscape.

About Dr. Rebecca Riggs

Dr. Rebecca Riggs is a passionate educator with extensive experience teaching biology and microbiology. Known for adapting her teaching style to support diverse learners, Dr. Riggs combines real-world relevance with engaging instruction. Her student-focused approach continues to shape the academic success of hundreds of Auburn University students each year.

