

Core: Biology

A video textbook that brings key concepts to life through high-impact animations and scientist-in-action videos of experiments being conducted in laboratory settings.

380+
videos

100+
scientist-in-action videos

14
subtitle languages

Comprehensive coverage offered through 36 chapters across 7 units:

- **Fundamentals** [3 chapters]
- **Cellular processes** [7 chapters]
- **Genetics** [6 chapters]
- **Human biology** [9 chapters]
- **Ecology** [4 chapters]
- **Evolution** [4 chapters]
- **Plant biology** [3 chapters]



“I found the [JoVE Core] videos very helpful in explaining experiments and new concepts to the students as the ability to visualise the concepts using the videos greatly aid in the student’s understanding. It also allowed students to revisit these concepts if they didn’t grasp it the first time during class.

“The [scientist-in-action] videos also provide an opportunity to show students how techniques covered in some of the basic core videos are used in real-life projects.”

— Nicolette Wright,
First Technical Assistant at Division of Microbiology,
University of Pretoria in South Africa

Cover the foundations of scientific discovery

With comprehensive coverage of introductory content for biology majors and non majors, JoVE Core: Biology videos enable quick, in-depth comprehension of complex science topics. The videos can also improve student engagement and learning outcomes by over 50%¹.

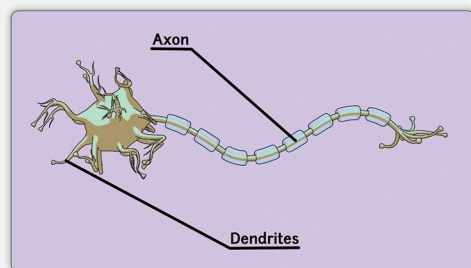
Facilitate success in in-person, flipped, and virtual classrooms

JoVE Core: Biology videos can be seamlessly integrated with online learning platforms such as Zoom, Microsoft Teams, and Google Classroom, as well as learning management systems. No matter the class format, 30+ minutes of lesson planning can be saved and allow for more time spent on instruction.

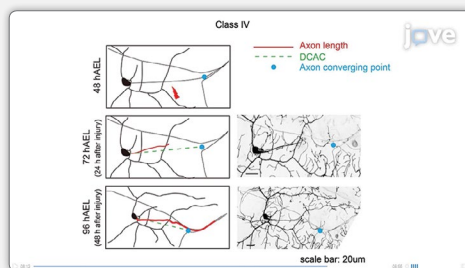
Use as an effective primary or supplementary teaching resource

When used in place of a traditional textbook, JoVE Core: Biology empowers students to move beyond memorization into understanding. Also used as a dynamic supplement, JoVE Core: Biology works well paired with other resources and textbooks.

High-Impact Animations



Scientist-in-Action Videos



¹ Ramachandran, R., Sparck, M., & Levis-Fitzgerald, M. (2019). Investigating the Effectiveness of Using Application-Based Science Education Videos in a General Chemistry Lecture Course. *Journal of Chemical Education* 96(3), 479-485.

When used as a supplement, videos can be mapped directly to other resources such as **Campbell Biology** and **OpenStax Biology**

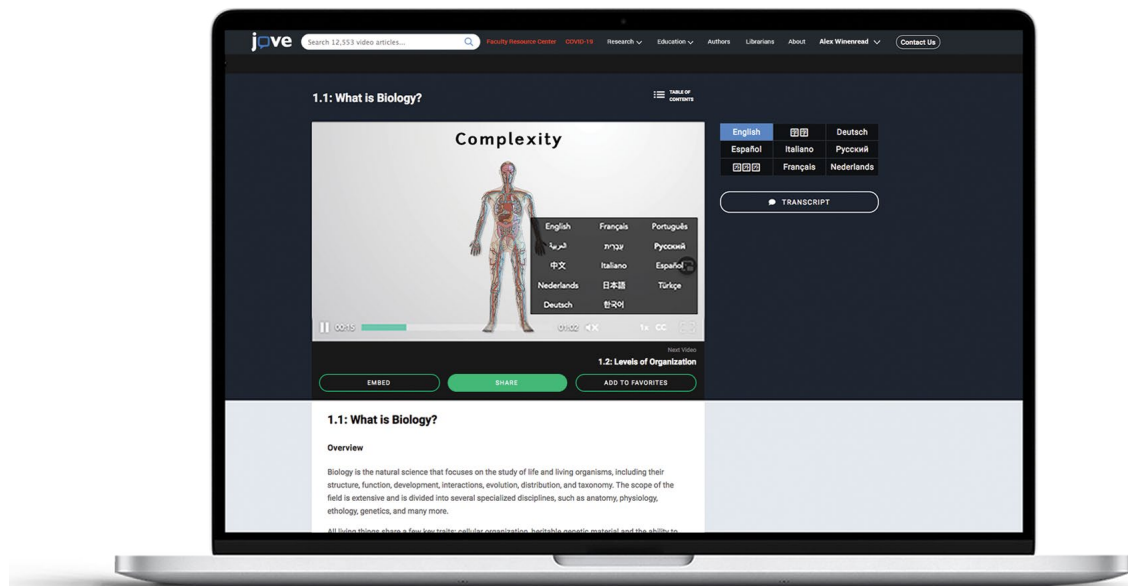
JOVE WHY DO BOTH INSTRUCTORS AND STUDENTS LIKE JOVE CORE: BIOLOGY?

Instructors like it because...

- **Short Videos** keep students engaged
- **Embed, Share and 'Add to Favorites'** Options allow easy integration into course websites or Learning Management Systems
- **Video Transcripts** support text-based learning
- **Reading Materials** enable deeper concept comprehension
- **Create Quiz** button allows using predefined tests, creating tests, customizing questions, or even creating them from scratch

Students like it because...

- **Animations** help illustrate key concepts
- **Translated Subtitles** support learning in a variety of languages
- **Closed Captions** allow for easy capture of all details
- **Video Speed Regulation** provides greater control over the learning process



“The videos that are most useful to me are from JoVE Core: Biology, particularly those from Plant Biology, the students have told me that although they are short, they are very illustrative and very clear ... The platform on which I have used the JoVE videos is Moodle and they are easy to insert [embed] so that they [students] can see them.”

—Octavio Gonzalez,
Professor of Chemistry,
National Autonomous University of Mexico in Mexico



“[Videos] were definitely useful in explaining concepts that were part of the course material and feedback from the students was that the videos made it easier for them to understand the concepts than from the content of the course material alone”.

— Dr. Karthik Subramanian Chandrasekaran,
Postdoctoral Researcher and Instructor,
University of Muenster in Germany