


## 课程介绍：参考页面最上方 ABOUT OCW 页面设计



GIVE NOW

ABOUT OCWHELP & FAQSCONTACT US

[Intro](#)[OCW@20 Vision](#)[Future of OCW](#)[OCW Milestones](#)[Beyond Course Materials](#)[President's Message](#)[Our Team](#)

Since 2001, MIT OpenCourseWare has been creating new opportunities for millions of learners and educators, sharing Open Educational Resources (OER) from MIT and helping to lead a global revolution in free access to knowledge.

MIT OpenCourseWare continues to build on this foundation. With a new web platform, ever-growing content, and collaborations across the vibrant open education ecosystem, we're creating a world of more equitable and inclusive education for all.


MIT OpenCourseWare is a free and open collection of material from thousands of MIT courses, covering the entire MIT curriculum.

Knowledge is your reward. Use OCW to guide your own life-long learning, or to teach others. MIT does not offer credit or certification to users of OCW – and asks for nothing in return.

No enrollment or registration. Freely browse and use OCW materials at your own pace. There's no signup, and no start or end dates.

Made for sharing. Download files for later. Send to friends and colleagues. Modify, remix, and reuse (just remember to cite OCW as the source.)

### Celebrating Two Decades of Sharing



OCW@20

### The OCW@20 Vision



Over our first 20 years, we've unlocked access to knowledge, helped launch the global OER movement, and opened MIT's full curriculum to the world. And we'll keep growing and evolving.

Our new platform, which you are now using, brings mobile users fully into OCW's global community...provides more powerful and insightful ways to discover the content you need...and will keep OCW a vibrant and current reflection of MIT's world-changing teaching and learning.

## 课程内容：参考网页课程内容

7.016 | Fall 2018 | Undergraduate

Introductory Biology

[Syllabus](#)[Calendar](#)[Readings](#)[Lecture Videos](#)[Recitations](#)[Assignments](#)[Exams](#)[Study Materials](#)

#### Course Description

7.016 Introductory Biology provides an introduction to fundamental principles of biochemistry, molecular biology, and genetics for understanding the functions of living systems. Taught for the first time in Fall 2018, this course covers examples of the use of chemical biology and twenty-first-century molecular genetics ... [Show more](#)

#### Course Info

INSTRUCTORS

[Prof. Barbara Imperiali](#)[Prof. Adam Martin](#)[Dr. Divya Ray](#)

DEPARTMENTS

[Biology](#)

LEARNING RESOURCE TYPES


☒ Problem Sets with Solutions☐ Exams with Solutions☐ Lecture Videos

TOPICS

▼ [Health and Medicine](#)

[Cancer](#)[Functional Genomics](#)

> [Science](#)



MIT Professor Barbara Imperiali, lecturing on luminescence and fluorescence and their applications to biological research. This version of Introductory Biology highlights key developments in therapeutics, as well as tools for advancing research. (Image by Jason Payer, MIT OpenCourseWare.)

[Download Course](#)

7.018 | Fall 2018 | Undergraduate

# Introductory Biology

Syllabus

Calendar

Readings

Lecture Videos

Recitations

Assignments

Exams

Study Materials

Syllabus

Course Meeting Times

Lectures: 3 sessions / week, 1 hour / session

Recitations: 2 sessions / week, 1 hour / session

Prerequisites

There are no formal prerequisites for this course, but we do presuppose high-school-level biology and chemistry (especially familiarity with the fundamental aspects of chemical structure).

Before taking this course, you may want to review [Pre-7.01 Getting up to Speed in Biology](#), a self-paced course designed to help prepare students for their first college-level biology class.

Textbook

The required textbook is: Sadava, D. E., D. M. Hillis, et al. *Life: The Science of Biology*. 11th ed. W. H. Freeman, 2016. ISBN: 9781319145446.

Recitations

Regular weekly attendance is expected. Each recitation section meets twice per week for 50 minutes.

Assignments

There will be six graded problem sets, but only your best five problem set scores will be used in determining your grade. While general discussions and collaboration on the problem sets are appropriate, detailed discussion of specific solutions or sharing of answers is a violation of the trust placed in all students in the class, each of whom is expected to produce their own unique set of answers. Students who copy problem sets or allow their answers to be copied will be assigned a zero for that problem set, and may be assigned a zero for all the problem sets.

In addition to the five problem sets, students will have a sixth assignment in which they will choose to prepare either a news brief or a "hands-on" project, worth 4% of their final grade. Please refer to the [Assignments](#) section for more detail.

Exams

There will be three 50-minute exams given during the term and a comprehensive final given during the finals week. The final exam will be a 3-hour cumulative exam covering the entire course.

Grading

Your overall course grade will depend on the following components:

ACTIVITIES	TOTAL POINTS	% OF OVERALL GRADES
Three Term Exams (100 points each)	300	51%
Five Problem Sets (20 points each)	100	15%
News Brief Proposal	20	4%
Comprehensive Final Exam	200	30%
Total	620	100%

Course Info

INSTRUCTORS

[Prof. Barbara Imperiali](#)  
[Prof. Adam Martin](#)  
[Dr. Divya Ray](#)

DEPARTMENT

Biology

AS TAUGHT IN

Fall 2018

LEVEL

Undergraduate

TOPICS

Health and Medicine

Cancer

Functional Genomics

Science

LEARNING RESOURCE TYPES

Problem Sets with Solutions

Exams with Solutions

Lecture Videos

Download Course

辅助学习：同上，思维导图单独设计。

互动区：这里没有参考，需要自己设计。

OpenCourseWare Stories

Stories from the OpenCourseWare community reflect the profound impact of sharing knowledge and the transformative power of open education.

Salim Al-Hassanieh

Educator

Syria

Retired professor Salim Al-Hassanieh has turned to MIT Open Learning's OpenCourseWare resources for decades, enriching his research and teaching. Lauren Rebecca Thacker | MIT Open Learning Salim Al-Hassanieh has moved...

Read Full Story

Mostafa Fawzy

Educator

Egypt

For physicist Mostafa Fawzy, MIT Open Learning's OpenCourseWare was a steadfast companion through countless study sessions. Lauren Rebecca Thacker | MIT Open Learning Mostafa Fawzy became interested in physics i...

Read Full Story

Martina Solano Soto

High School Student

Spain

The 17-year-old student from Spain uses MIT resources to deepen her understanding of math and physics. Lauren Rebecca Thacker | MIT Open Learning Martina Solano Soto is on a mission to pursue her passion for physics and...

Read Full Story