

Preface

To the Student,

Being a college student today means juggling many priorities: work, school, extracurricular activities, family. If you're reading this book, you've probably enrolled in your first college science course, and it may be the only one you'll ever take. With so many priorities competing for your attention, you may be unsure how to fit studying biology into your busy life. Good news: This book is written specifically for you!

Over the years, I've observed students in my classes striving to succeed while also being as efficient as possible with their study time. *Biology: The Core* was designed from the ground up to help you learn effectively and thrive in this course. Only the most important and relevant information—the core of biology content—is included. These biological concepts are displayed in highly visual and approachable two-page modules that guide you along a clear learning path, so that reading your textbook is more a pleasure than a chore.

You might also be wondering how this course—and biology in general—applies to your own life. Luckily, this is easy to address, since issues like nutrition, cancer, reproductive health, and genetically modified foods directly affect you and those you care about. For the Second Edition, new modules were added to help you critically evaluate the scientific-sounding claims that constantly bombard you, about everything from diet and nutrition to cancer and heart disease. We also worked hard to connect biological concepts to experiences you might have in your everyday life.

Biology: The Core textbook is paired with a robust online library, MasteringBiology, that contains videos, current events, and interactive tutorials that help you draw connections between the course material and the world around you. Questions you might have about many topics will be addressed in this online complement to your textbook. It is filled with truly helpful multimedia tools that allow you to gain a thorough understanding of the content so that you can succeed in your course. Icons at the top of some modules point you to the most valuable online tools.

I hope that *Biology: The Core* meshes with your goals and your priorities, acting as a helpful guide for this course and addressing questions you run into in your broader life. Please feel free to drop me a line to tell me about your experience with *Biology: The Core* or to provide feedback regarding the text or online resources.

Best wishes for a successful semester—and enjoy the big adventure of biology! It's not only in the pages of this book, but all around you.

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To the Instructor,

In a world with so many options for non-major biology textbooks, what makes this one different? The answer is: a focus on today's students. We've all watched our non-science-major students struggle with the depth of material and relating biology to their lives. Which concepts do non-science students *need to know* in order to understand the relevance of biology? If we pare down the content and focus on the most important take-home lessons—the information that we hope students will remember 10 years after your course—what remains is the core: a set of essential biological concepts that presents the big picture, providing students with a scientific basis for the issues they will confront throughout their lives.

Biology: The Core is a new kind of textbook, one that presents information in small chunks using a nonlinear, engaging, visual style. The book contains only the most essential content for each topic. All information is presented in stand-alone two-page modules that fully integrate narrative and art into a single teaching tool. Modules can be read in any order, allowing you the flexibility to assign topics in whatever sequence best suits your course.

For the Second Edition of *Biology: The Core*, content was revised based on feedback received from professors and students using the text around the country. The specific changes are detailed on the following pages, but the overall approach is to ensure that the core content is approachable and clearly connected to students' lives. Because we all know how difficult it can be for students to think scientifically, in this Second Edition, particular emphasis is placed upon helping students to appreciate and apply critical thinking skills to their own lives.

The printed text is paired with MasteringBiology, an online tutorial platform that allows you to reinforce the book content and expand on the basic concepts presented in each module as needed. The activities and resources in MasteringBiology also offer you the flexibility to incorporate a wide variety of applications and current issues—including several ones new to this edition—into your teaching. Unlimited by the particular set of examples printed in a static textbook, a rich collection of online resources—including Current Topic PowerPoint presentations, news videos, *New York Times* articles, and interactive tutorials—enables you to connect the core content to interesting, relevant, and timely applications and issues that are important to you and your students. A set of 21 Guided Video Tours found within MasteringBiology are designed to help students learn to use the textbook and to hone their study skills.

I hope that the aims of *Biology: The Core* resonate with the teaching and learning goals of your non-major introductory biology course. Feel free to drop me a line to tell me about your course and your students, to provide feedback regarding the text or the online resources, or just to chat about the non-major course in general—it's my favorite topic of conversation!

Best wishes for a successful semester,

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