About the Authors

Dorothy Winger has more than 25 years of experience as a teacher and leader in health science and curriculum development. She taught Introduction to Health Occupations, Body Structure and Function, Medical Terminology, and Health Information Office Assistant at Madison East High School, in addition to dual-credit Medical Terminology for Madison Area Technical College. She was also the program coordinator for Nursing Assisting and led Madison Metropolitan School District's health science curriculum writing team. She served as a HOSA advisor, Red Cross blood drive coordinator, and Youth Health Service Corp advisor. She has coauthored multiple curriculum and standards projects at state and local levels and presented at the state and national levels. She served as president of Wisconsin Health Occupations Professional Educators, was Wisconsin HOSA advisor of the year, and served on the Wisconsin Governor's Task Force on the Health Care Worker Shortage and Wisconsin's Disciplinary Literacy Standards Leadership Team. She was a Continuing Professional Development Specialist for the University of Wisconsin School of Medicine and Public Health Pediatric Department, setting up educational events for American Medical Association continuing education credits. She continues to serve as an education consultant.

Sue Blahnik is a dedicated educator whose teaching career spans 40 years. Focusing on secondary education, she has taught career and technical coursework in health science, as well as family and consumer education. She developed a health science career pathway program for her local high school, established and managed the nursing assisting program, supervised youth apprentices, and advised the local HOSA chapter. Sue has written statewide curriculums and served on the statewide team to develop health science standards. She has presented at both national and state conferences and served as the president of the Wisconsin Health Occupations Professional Educators. An avid supporter of service learning, Sue mentored students and fellow educators and has been awarded several grants to support health science instruction and service-learning projects. Sue continues her commitment to students and learning as an educational consultant and author.

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New to This Edition

The second edition of *Introduction to Health Science* has been reorganized to better support instruction that follows the National Health Science Standards. For example, content about teamwork is now contained within one lesson to support instruction that follows the sequence of these standards. This new edition has also been updated to reflect the ever-changing advances in medical understanding and technology. New HOSA Event Prep activities in each chapter support connections to HOSA events.

HOSA—Future Health Professionals

HOSA—Future Health Professionals is a global, student-led organization empowering future health professionals through collaboration, education, and experience. This organization introduces students to health careers and provides opportunities to build key leadership, communication, interpersonal, and healthcare skills.

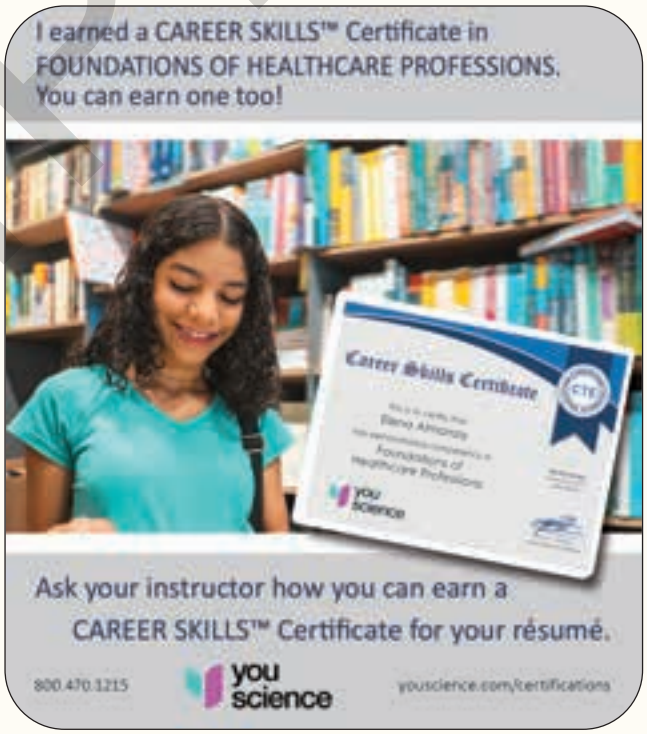
Available at the middle school, secondary, and postsecondary levels, HOSA is a powerful instructional tool for equipping and educating future health professionals. If there is a HOSA chapter at your school, this course and text can help prepare you to participate, demonstrate your knowledge, and earn recognition through competitive events. If there is not a HOSA chapter at your school, you can talk with your instructor about starting one.

Throughout *Introduction to Health Science*, HOSA Event Prep icons identify activities specifically crafted to help you practice for competitive events. Some examples of how this program supports HOSA events follow:

- HOSA Event Prep features at the beginning of every chapter suggest HOSA events related to chapter content. Examples include *Family Medicine Physician* in Chapter 3: Health Science Career Preparation, *Healthy Lifestyle* in Chapter 9: Health Maintenance for Health Professionals and Patients, and *Medical Terminology* in Chapter 17: Medical Terminology and Body Organization.
- Activities at the end of each chapter help prepare you for competitive events such as *Prepared Speaking* and *Health Informatics*.

Precision Exams by YouScience Certification

Goodheart-Willcox is pleased to partner with YouScience to correlate *Introduction to Health Science* with their National Health Science Certification (NCHSE National Exam), Foundations of Healthcare Professions, and Essential Healthcare Practices certification standards. Students who pass the exam and performance portion of the exam can earn a Career Skills certification. Precision Exams by YouScience and Career Skills Exams were created in partnership with industry and subject matter experts to align real-world job skills with marketplace demands. Students can showcase their skills and knowledge with industry-recognized certifications—and build outstanding resumes to stand out from the crowd!



MesquitaFMS/E+ via Getty Images

And for teachers, Precision Exams by YouScience provides:

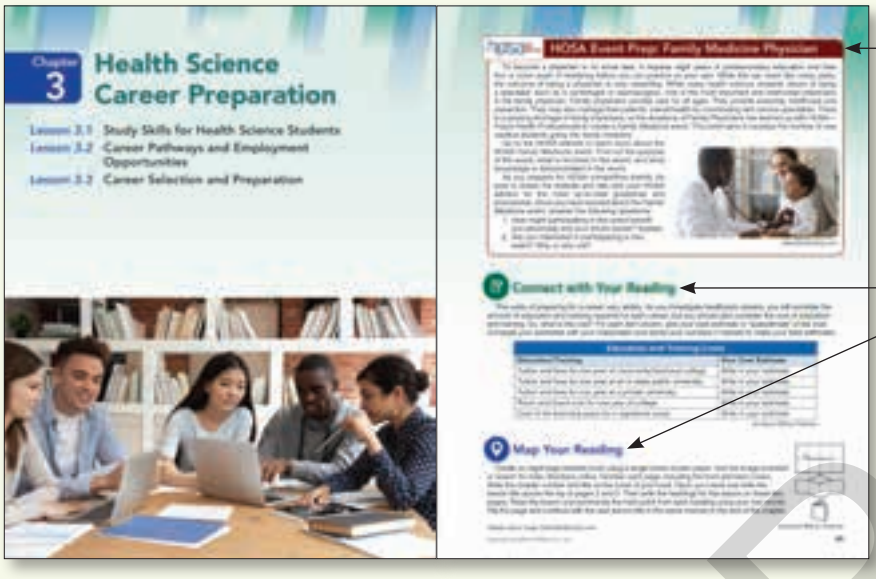
- Access to a library of Career Skills Exams, including pre- and post-assessments for all 16 National Career Clusters
- Suite of on-demand reporting to measure program and student academic growth
- Easy-to-use, 100% online administration

To see how *Introduction to Health Science* correlates to Precision Exams by YouScience standards, visit the Correlations tab at www.g-w.com/introduction-health-science-2024. For more information about Precision Exams by YouScience, visit www.youscience.com/certifications/career-clusters/.

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Guided Tour

The instructional design includes student-focused learning tools to help students succeed. This visual guide highlights the features designed for the textbook.



HOSA Event Prep activity introduces HOSA events related to the chapter.

Connect with Your Reading and **Map Your Reading** activities help you organize your notes and think about the chapter's topics before reading, a proven strategy for strengthening comprehension.



Learning Outcomes clearly identify the knowledge and skills to be obtained when the lesson is completed.

Professional Vocabulary lists the key terms to be learned in the lesson. You will need to learn the essential terms listed before you begin your reading. These terms, highlighted in yellow within the text, will help you understand the main concepts of the lesson. In addition, you will see bold terms explained where they first appear. These terms will deepen your understanding of the topics presented. Both will become part of your professional vocabulary.

Essential Question provides a starting point for thinking about the material in the lesson.



Healthcare Professions connect health science content to real-world experiences in a true introduction to healthcare careers.

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Step-by-Step Procedures are highlighted throughout the text to provide clear instructions for healthcare tasks. You can refer back to these procedures easily.

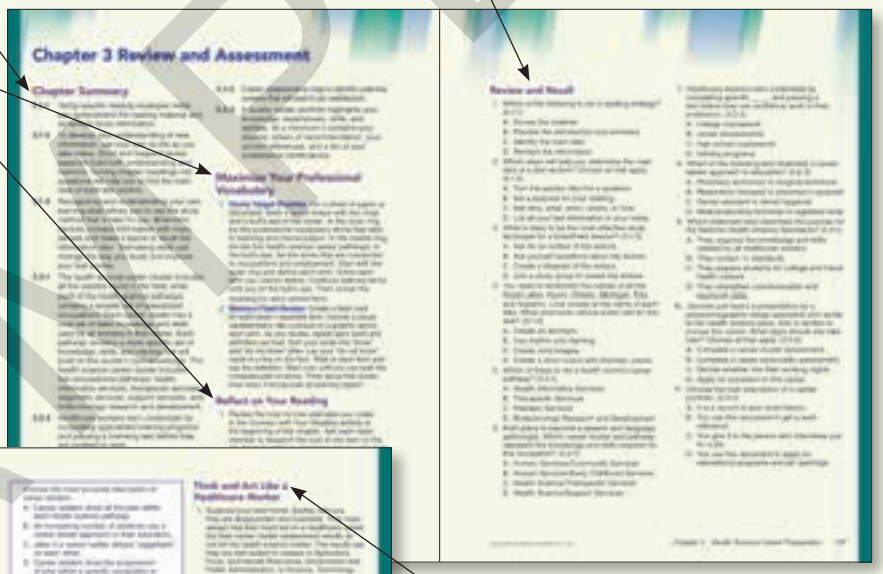


Lesson Review questions at the end of each lesson provide opportunities to extend your learning and help you apply knowledge.

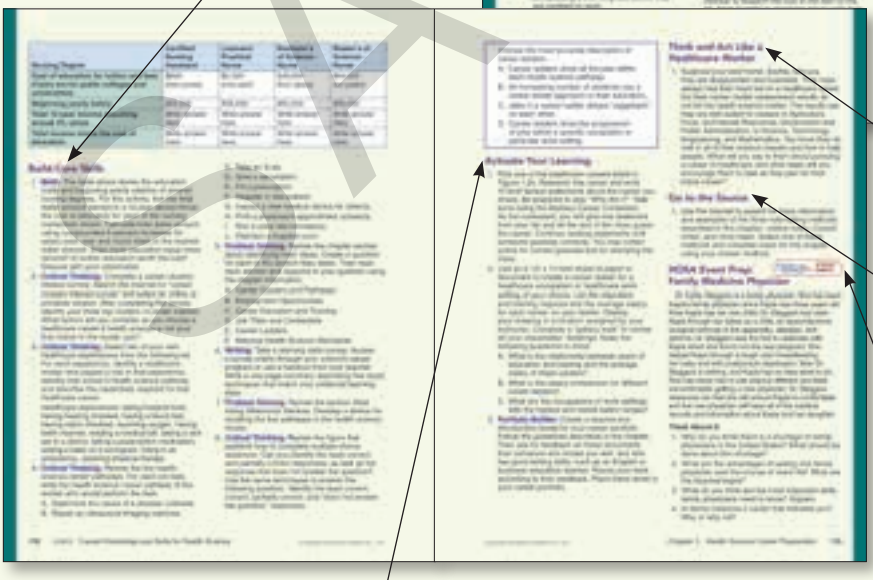
Chapter Summary provides an additional review tool for you and reinforces key learning outcomes.

Review and Recall questions allow you to demonstrate knowledge, identification, and comprehension of chapter material.

Maximize Your Professional Vocabulary and **Reflect on Your Reading** activities help you remember and use key vocabulary and reflect on what you have read.



Build Core Skills activities help you apply and use what you have learned in connection with key skills such as math, reading, speaking, and critical thinking.



Think and Act Like a Healthcare Worker activities help you practice performing key career skills.

Go to the Source provides practice reading primary source documents and demonstrating other realistic reading tasks of a healthcare worker.

HOSA Event Prep activity helps prepare you to participate in HOSA events related to the chapter.

Activate Your Learning activities give you opportunities to physically use the information from the chapter.

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TOOLS FOR STUDENT AND INSTRUCTOR SUCCESS

Student Tools

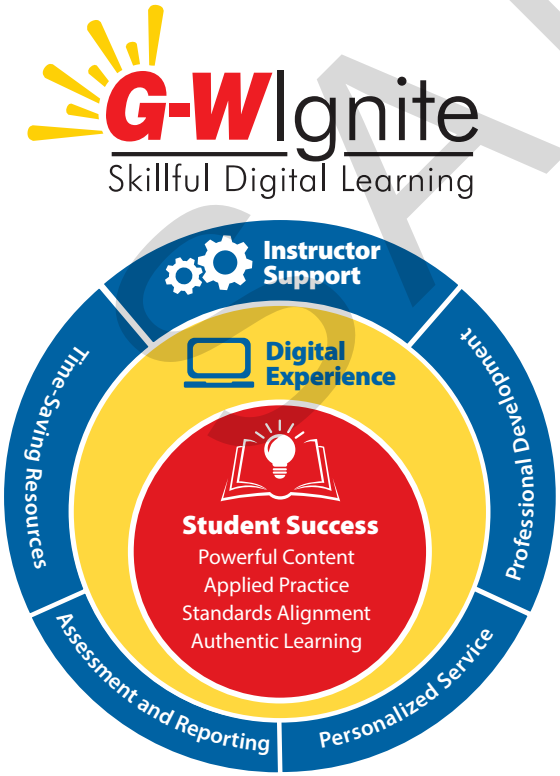
Student Text



Introduction to Health Science is an introductory health science textbook for high school students, written by health science instructors. *Introduction to Health Science* delivers essential content in an accessible, inviting, lesson-based format that strengthens students' literacy skills and healthcare vocabulary.

Companion Website

- E-flash cards and vocabulary exercises allow interaction with content to create opportunities to increase achievement.
- Interactive activities reinforce key concepts from the text with engaging and informational graphics.



Instructor Tools

G-W Ignite

G-W Ignite provides a seamless user experience for both you and your students. The easy-to-navigate interface and class rostering capabilities make setting up a course easy and intuitive. Instructors can quickly and easily share assignments with students. Autograded activities and assessments make grading easier than ever, and rubrics are provided for ease of grading when required. Extensive reporting capabilities allow instructors to view students' progress and evaluate performance against learning outcomes and key standards. Students have their own My Progress dashboard where they can view grades and comments from their instructor.

G-W Ignite provides a complete learning package for you and your students. The included digital resources help your students remain engaged and learn effectively:

- The **Online Textbook** is a reflowable digital textbook that works well on all devices. It also works well with screen readers and accessibility tools.
- **Digital Activities** provide opportunities for students to reinforce understanding of learning outcomes in the text. Instructors can easily assign activities for each lesson, while easy grading tools, such as autograding, integrated answer keys, and rubrics, save time.
- **Videos** demonstrate important procedures or dive deeper into key concepts from the text. These videos clarify steps and aid students in visualizing important skills. Guided worksheets are provided to help students take notes as they watch each video. Video quiz questions help assess student comprehension in real time.
- **Drill and Practice Vocabulary Activities**, which are provided for all professional vocabulary terms in every lesson, provide an active, engaging, and effective way for students to learn the required terminology.
- Use the **Pretests**, **Posttests**, and **Exams** to assess students' knowledge of learning outcomes and key standards. These prebuilt assessments help you measure student knowledge and track progress in achieving learning outcomes.
- The **Instructor Resources** provide instructors with time-saving preparation tools such as answer keys, editable lesson plans, and other teaching aids.
- **Instructor's Presentations for PowerPoint®** are fully customizable, richly illustrated slides that help you teach and visually reinforce the key concepts from each chapter.

See www.g-w.com/introduction-health-science-2024 for a list of all available resources.

Professional Development

- Expert content specialists
- Research-based pedagogy and instructional practices
- Options for virtual and in-person Professional Development

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To the Student

Welcome to the field of health science!

We hope you will enjoy learning from the experiences and insights of healthcare workers as you read about the wide variety of careers in healthcare. You will study the five health science career pathways and will learn professional skills and standards of behavior used by workers in each pathway.

As you use the reading supports provided in this text, including professional vocabulary, mapping your reading, and connecting with and reflecting on your reading, you will improve your understanding of health science content. At the same time, you will strengthen your reading and comprehension skills.

Whether you have a specific career in mind or are just beginning your search, you will be excited to know that there are literally hundreds of healthcare occupations from which to choose. When you read about work personalities, leadership styles, and preferences for data, people, things, or ideas, take time to consider your own personal preferences, and you will discover satisfying career options for your future. Practicing the technical skills associated with each pathway will provide additional clues to your preferred career pathway.

Prepare for challenging health science coursework by sharpening your study skills. Use the memory techniques for learning vocabulary, try different methods for taking notes, and assess your personal learning style to improve your study habits. If you develop a plan for managing your time and learn skills for taking exams now, you will see the benefits throughout your school and work life.

Above all, we hope you will be excited to learn about the amazing variety of healthcare careers and will feel prepared to discover the pathway to your future career!

Dottie Winger

Sue Blahnik

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