Preface

Students in two-semester allied health–related programs typically encounter a fast-paced anatomy and physiology course that leaves little time for leisurely learning. These students are intently focused on achieving their goals, which requires a course that includes a brief, hands-on laboratory experience to flesh-out and clarify the lecture sessions. This challenge is what provided the impetus for developing this concise laboratory manual.

Basic Pedagogical Approach

The Seventh Edition offers a variety of experiments to give the instructor the flexibility to choose which will best supplement what is being taught in lecture. This manual is a standalone resource that can complement any textbook. Because each experiment is preceded by pertinent background information, students will not find it necessary to carry their textbooks to the lab.

Although length and content have been rigorously controlled, the 27 exercises in this manual still provide fairly complete coverage of the routine topics of human anatomy and physiology.

For instructors who wish their students to have experience using a microscope, this manual also includes a complete exercise on its use and care (see Appendix A).

Pedagogy and Special Features

1. The art and photo program includes tissue tables with photomicrographs, realistic muscle art, and large illustrations that highlight and differentiate important structures and help students recognize important relationships between structure and function. Photographs supplement the art to show isolated organ specimens for dissection and observation.

2. Each exercise is preceded by a list of materials needed for conducting the laboratory, followed by learning outcomes, summaries of key concepts, step-by-step instructions, and efficient tear-out review sheets that can be used for pre-lab or post-lab review.

3. Body structures are studied from simple to complex. Histology lessons will be expedited by slides set up by the instructor at demonstration areas for student viewing, so students do not have to spend time trying to find the “right” section. These, along with physiology experiments (written to be conducted in limited time periods and with inexpensive, widely available equipment and supplies) allow ample opportunity for student observation, manipulation, and experimentation.

4. All exercises involving body fluids (blood, saliva, etc.) incorporate current Centers for Disease Control and Prevention guidelines for handling body fluids. A safety icon alerts students to observe special precautions.

5. An Instructor’s Guide is available to instructors upon request (0-13-520203-5). This Guide contains answers to activity and review sheet questions, and information on laboratory supply houses.

For information on creating a custom version of this manual, visit www.pearsonhighered.com/collections/, or contact your Pearson representative for details.

New to the Seventh Edition: Highlights

- Dozens of new, full-color illustrations, and photos replace many black and white line drawings to help students differentiate among structures and more easily interpret diagrams.

- New Clinical Application Questions have been added to the Exercise Review Sheets to challenge students to apply lab concepts and critical thinking skills to real-world clinical scenarios.

- Improved Interior design incorporates more saturated colors in headings and exercise tabs to improve readability.

- Content and illustration updates have been made throughout the Seventh Edition. Please contact your Pearson representative for more details.

Also Available

- The Anatomy & Physiology Coloring Workbook, Twelfth Edition by Elaine Marieb and Simone Brito. (0-13-445936-9)


- The Physiology Coloring Book, Second Edition by Wynn Kapit, Robert Macey, and Esmail Meisami. (0-321-03663-8)

- MasteringA&P™ for Anatomy & Physiology, Seventh Edition is highly recommended. Mastering is the most effective and widely used online homework, tutorial, and assessment system for the sciences. To learn more, ask your Pearson representative for details.

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As always, we invite users of this edition to send us their comments and suggestions for subsequent editions.

Elaine N. Marieb and Lori A. Smith
Pearson Education, Anatomy and Physiology
50 California Street, San Francisco, CA 94111