

*Foundations of*  
**Physical Education,  
Exercise Science, *and* Sport**

Deborah A. Wuest • Jennifer L. Fisette

Seventeenth  
Edition



17th Edition

# FOUNDATIONS OF PHYSICAL EDUCATION, EXERCISE SCIENCE, AND SPORT

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FOUNDATIONS OF PHYSICAL EDUCATION, EXERCISE SCIENCE, AND SPORT,  
SEVENTEENTH EDITION

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# PREFACE

This is an exciting time to prepare for a career in physical education, exercise science or sport. Scientific evidence supports the significant contribution of physical activity to health, interest and participation in sport continues to grow, and physical education has the potential to help young people learn to be active for a lifetime. A multitude of opportunities await qualified professionals dedicated to providing quality experiences for participants in their programs.

We challenge students from the beginning of their careers to commit to ongoing development and growth as professionals in their fields. Students are encouraged to be advocates for physical activity and quality physical education, to value diversity and appreciate its many forms, and to work toward making opportunities to participate in physical activity available to all people throughout their lifespan. We hope that, as young leaders, they will work collaboratively with other dedicated professionals to address the issues facing us, the challenges ahead, and the realization of physical education, exercise science, and sport's potential to positively contribute to the lives of all people.

## ORGANIZATION

The 15 chapters of this book are organized into 4 parts. Part I provides students with an orientation

to the field. Chapter 1 focuses on the meaning and scope of contemporary physical education, exercise science, and sport. Emphasis is placed on understanding the scope of the discipline and committing to professional development. In Chapter 2, students are introduced to the philosophy, goals, and objectives of physical education, exercise science, and sport. The last chapter in this part, Chapter 3, discusses our role in society in relation to the changing demographics, wellness movement, and fitness and physical activity movement.

In Part II, the historical foundations of the field and an overview of some of the subdisciplines are presented. The historical foundations are covered in Chapter 4, including our heritage from other countries and the significant influences on the growth of the field in the United States. In Chapter 5, an overview of motor behavior is provided, including motor learning and motor development. This is followed by Chapter 6 on biomechanics and Chapter 7 on exercise physiology. In Chapter 8, an overview of sport sociology is presented, and Chapter 9 provides information on sport and exercise psychology. Chapter 10, Sport Pedagogy, is a new chapter providing information on curriculum, teaching, and assessment.

Part III, which consists of four chapters, addresses professional considerations and career



opportunities, including enhancing professional marketability. Chapter 11 focuses on professional development, including professional responsibilities, ethics, leadership, and certification. Chapter 12, on teaching and coaching careers, shows how opportunities for these careers have broadened from the school setting and school-age population to nonschool settings and people of all ages. In Chapter 13, employment opportunities for professionals interested in fitness-and health-related careers are discussed. Careers in sport management, sport communication, performance, and other sport-related careers are described in Chapter 14.

Part IV explores issues and challenges confronting professionals today and looks ahead to the future. The final chapter, Chapter 15, addresses critical issues, specifically leadership in physical activity and youth sport, the growing field and our identity, and the gap between research and practice. Challenges facing professionals are identified. Providing high-quality daily physical education, advocacy, achievement of the national health goals, and lifespan involvement for all people are significant challenges that merit our attention and commitment. Societal trends and current developments are discussed. To prepare for the future, professionals must be willing to assume the responsibility for the leadership of our field and work to improve the way in which we provide services to people of all ages.

## HIGHLIGHTS OF THIS EDITION

The 17th edition of *Foundations of Physical Education, Exercise Science, and Sport* continues its dual emphasis on providing students with an overview of disciplinary knowledge and encouraging them to explore the expanding career opportunities. This edition reflects the dynamic nature of the discipline today and is designed for use in introductory and foundations courses. This edition has been restructured to enhance the balance and emphasis placed on physical education, exercise science, and sport. The emphasis on education has been reduced and consolidated by adding a new chapter on sport pedagogy. Expanded

examples are used to increase relevancy to a wider audience of majors in exercise science and sport. While retaining its depth and breadth, the text has been streamlined, and boxes, tables, and charts used to highlight key concepts.

The text continues its focus on the role of physical education, exercise science, and sport professionals in promoting lifespan participation in physical activity for all people. This text emphasizes the need for culturally competent professionals to work with our increasingly diverse population. The responsibility of professionals to serve as advocates for historically underserved populations is stressed; this work is essential if our goal of lifespan involvement in physical activity is to be achieved.

Updated information and statistics are used to help students stay abreast of developments within physical education, exercise science, and sport. Key changes to this edition are highlighted below:

- The first three chapters have been restructured to provide students with a better introduction to physical education, exercise science, and sport. The first chapter covers the meaning and scope of the discipline, the second chapter outlines the philosophy of the subject to provide a framework for goals and objectives, and the third chapter focuses on the contributions to society made by experts and professionals in the field of exercise science.
- New examples broaden the book's scope and appeal. While previous editions highlighted the educational aspects of the field, this edition seeks to be more inclusive of exercise science and sport majors.
- A new Chapter 10, Sport Pedagogy, recognizes the importance of the subdiscipline and consolidates information pertaining to teaching physical education. This chapter covers curricular development, assessment, and teacher effectiveness, and will help students think critically about these topics regardless of whether they will be pursuing teaching careers.
- New end-of-chapter Discussion Questions are added to this edition and can be used by

- instructors to engage students' critical thinking skills in the classroom. Other new features include information on critiquing web pages and on reading and understanding research.
- Key government reports and policies that have significant applications for professional practice, such as *The Surgeon General's Vision for a Healthy and Fit Nation* and *2008 Physical Activity Guidelines for Americans*.
  - Since the future of physical education, exercise, and sport are closely related to the issues and challenges of today, this edition combines these topics in one final chapter.

Another major change in this edition is the addition of a new coauthor, Jennifer L. Fisette. As a young professional, Jen brings to this edition a contemporary understanding of physical education, exercise science, and sport.

We hope that readers will gain knowledge and inspiration through the topics and issues discussed in this text. We hope that they will aspire to be future leaders and agents of change as physical education, exercise science, and sport professionals.

## SUCCESSFUL FEATURES

To facilitate use by instructors and students, the following pedagogical aids have been incorporated into this textbook:

**Instructional Objectives.** At the beginning of each chapter, the instructional objectives and competencies to be achieved by the student are listed. This identifies for the student the points that will be highlighted. Attainment of the objectives indicates the fulfillment of the chapter's intent.

**Summaries.** Each chapter ends with a brief review of the material covered, assisting the student in understanding and retaining the most salient points.

**Discussion Questions.** At the end of each chapter, discussion questions are provided to stimulate critical thinking. Students are encouraged to share their perspectives with their classmates and to explore different solutions to the problems and issues presented.

**Self-Assessment Activities.** Self-assessment activities are presented at the end of each chapter

to enable students to check their comprehension of the chapter material.

**References.** Each chapter provides up-to-date references to allow students to gain further information about the subjects discussed in the chapter.

**Internet Resources.** Each chapter begins with a *Get Connected Box*, which lists Internet sites that provide up-to-date information about relevant topics. The self-assessment exercises include activities that draw on these Internet resources.

**Photographs.** Carefully chosen photographs, many new, have been used throughout the text to enhance the presentation of material and to illustrate key points.

**Writing Style.** *Foundations of Physical Education, Exercise Science, and Sport* has been written in a style that students find readable and that provides them with important insights into the foundations and the roles of physical education and sport in the world today. Students will find substantial information about the career and professional opportunities that exist for knowledgeable, dedicated, and well-prepared professionals committed to the promotion of lifespan involvement in physical activity for all people.

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## SUPPLEMENTS

The 17th edition of *Foundations of Physical Education, Exercise Science, and Sport* features an instructor's website ([www.mhhe.com/wuest17e](http://www.mhhe.com/wuest17e)) that offers a variety of resources, including an Instructor's Manual, PowerPoint presentations, and web links to professional resources. Please contact your McGraw-Hill sales representative for additional information and to gain access to the site.

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This edition is dedicated to the memory of Charles A. Bucher, the author of many of the earlier editions of this *Foundations* text. Bucher died in 1988 after a long and illustrious career committed to educating future physical education, fitness, and sport professionals. Bucher was a professor at New York University for 35 years and, after retiring in 1979, a professor at the University of Nevada until his death. At the time of his death, he was president and executive director of the National Fitness Leaders Association. His work on the earlier editions of this book helped set the tone for the many editions that followed, and we are indebted for his pioneering efforts.

In closing, the authors would like to acknowledge the people who helped support them throughout this endeavor.

**Deborah Wuest.** I'd like to dedicate this edition to my daughter, Meriber, who has been supportive throughout this revision and the many that came before. At 18, she is pursuing her passion for soccer as a student-athlete. This book is also dedicated to my early-morning writing

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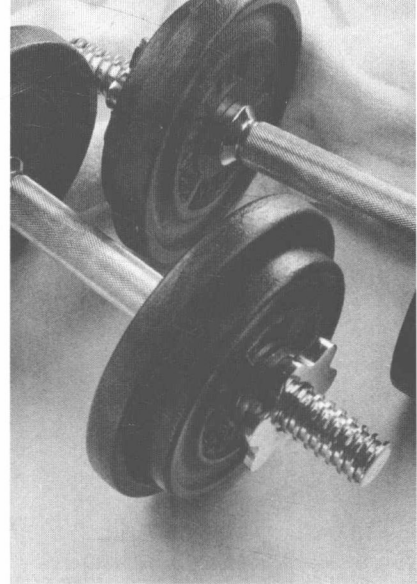
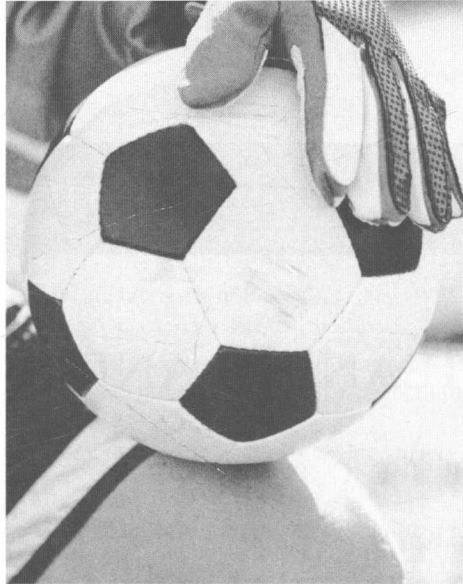
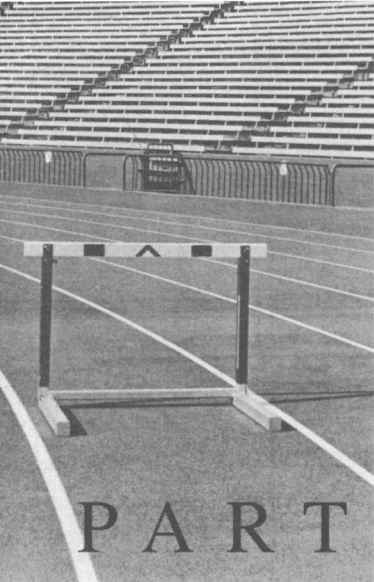
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PART

# I

## Nature and Scope of Physical Education, Exercise Science, and Sport

**P**art I introduces the reader to physical education, exercise science, and sport. The first chapter sets the stage for the reader by providing definitions and an introduction to the specialized areas of study within physical education, exercise science, and sport. How to grow as a professional in physical education, exercise science, and sport concludes Chapter 1. The second chapter includes the influences of various philosophies on programs and provides the reader with information about the objectives of physical education, exercise science, and sport.

The contribution of physical education, exercise science, and sport to society and health, and the critical role of professionals delivering services to people of all ages are described in Chapter 3.

Physical education, exercise science, and sport represent a growing and expanding field. The growth of this field is reflected in the expanding knowledge base and the development of specialized areas of study. The expansion of physical education, exercise science, and sport has created a diversity of career options for professionals.



# CHAPTER 1

## MEANING AND SCOPE

### OBJECTIVES

After reading this chapter the student should be able to—

- Discuss the nature of contemporary physical education, exercise science, and sport and show how it has evolved during the past five decades.
- Define the following specialized areas of study: sport philosophy, sport history, sport sociology, sport and exercise psychology, motor development, motor learning, biomechanics, exercise physiology, sports medicine, sport pedagogy, adapted physical activity, and sport management.
- Clarify the relationship between the discipline and the profession relative to the field of physical education, exercise science, and sport.
- Explain the relationship of physical education, exercise science, and sport to allied fields of study.
- Describe the different types of research reports and their application to physical education, exercise science, and sport.
- Identify social media resources that can inform the practice within the field of physical education, exercise science, and sport.

This is one of the most exciting, dynamic times in the history of physical education, exercise science, and sport. Unfolding before us is the vision of lifetime involvement in physical activity for all people. This is a powerful vision, one that is compelling for physical educators, exercise scientists, and sport leaders who choose to embrace it and extraordinary in its potential to affect the well-being and quality of life of people of all ages.

Contemporary physical education, exercise science, and sport have evolved from a common heritage—the traditional program of physical education designed to prepare teachers to serve children and youth in the school setting. Since the 1960s the foundation, scope, and focus of our programs have grown and changed tremendously. As physical education expanded, new disciplines of study—exercise science and sport—emerged. As the knowledge base comprising this multidimensional field grew, specialized areas of study evolved and exciting new career opportunities began to appear for qualified professionals. Today physical education, exercise science, and sport