

INTRODUCTION TO  
PHYSICAL EDUCATION,  
EXERCISE SCIENCE,  
AND SPORT STUDIES

ANGELA LUMPKIN

SEVENTH EDITION



# INTRODUCTION TO PHYSICAL EDUCATION, EXERCISE SCIENCE, AND SPORT STUDIES

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SEVENTH EDITION

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# Preface

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*Introduction to Physical Education, Exercise Science, and Sport Studies* provides students with an exciting opportunity to discover the diversity of physical education, exercise science, and sport and the wealth of careers available in these fields. Students are introduced to the heritage, current programs, and future potential of the field they are considering. This book introduces students to these multifaceted fields and involves them in examining potential careers in physical education, exercise science, and sport.

The intent of this book is to broaden students' understanding of how the philosophies and programs of physical education, exercise science, and sport evolved as well as to present the current status of these fields. Inherent within the changing nature of physical education, exercise science, and sport is a need to examine how Title IX of the 1972 Education Amendments, the inclusion into classrooms of physically and mentally challenged students, the increased emphasis on physical activity and fitness for all ages, past programs in the United States and in Europe, and various philosophies and ethical perspectives have affected and will continue to influence professionals in these fields.

No longer are physical education, exercise science, and sport just for schools or colleges, although teaching in these settings is certainly an important endeavor. By learning about careers in leisure services, athletic training, corporate fitness, sport management, fitness club instruction and management, recreation for all ages and abilities, coaching, cardiac rehabilitation, and a variety of other activity-related pursuits, students will gain a clearer perspective of the future role physical education, exercise science, and sport should play in American society. Individuals who accept the challenges of these careers will help women, ethnic minorities, senior citizens, individuals in lower socioeconomic classes, individuals with special needs, students, and others benefit from active, fit lifestyles. Practical suggestions are provided to help students choose and prepare for careers. To enhance this process, the importance of physical education, exercise science, and sport as expanding and diverse fields of service, enjoyment, and employment is emphasized throughout the book.

## NEW TO THIS EDITION

The seventh edition of this book provides insights into the increasing emphasis on exercise science and careers associated with physical activity. Throughout the book, more information has been provided on exercise science, physical activity, and fitness and the importance of these to the future of each person. Each chapter has been updated with revisions and expansions of key topics and includes some of the latest research to stimulate students' critical thinking and continued study. New photos throughout the book help reinforce students' learning of key concepts in the text. The review questions, student activities, suggested readings,

and Web sites have been revised and updated. Finally, important terms are defined where they first appear within each chapter to reinforce the content.

### **Chapter 1 Physical Education, Exercise Science, and Sport Studies—Dynamic Fields**

- Expanded significantly on the importance of physical activity
- Clarified and expanded the definitions of several key terms
- Revised and updated Web resources
- Included new research box on the components and principles of physical fitness
- Clarified and expanded the allied fields and career options
- Added a lifestyle survey
- Enhanced quality of pictures
- Added new and updated suggested readings

### **Chapter 2 Exercise and Sport Sciences**

- Moved discipline-profession debate from Chapter 3
- Clarified and expanded the definitions of the exercise and sport sciences
- Enhanced quality of pictures

### **Chapter 3 The Profession of Physical Education, Exercise Science, and Sport Studies**

- Reduced the emphasis on AAHPERD
- Expanded emphasis on other professional organizations
- Added box on a professional organization in each of the exercise and sport sciences along with their Web sites and professional journals
- Enhanced quality of pictures
- Added new and updated suggested readings

### **Chapter 4 Philosophy of Physical Education, Exercise Science, and Sport**

- Added examples to help students differentiate between the five traditional philosophies
- Included new Code of Ethics of the National Athletic Trainers' Association
- Revised and updated Web resources
- Enhanced quality of pictures
- Added new and updated suggested readings

## **Chapter 5 Selecting a Career**

- Revised extensively the factors influencing career choices
- Revised extensively the lifestyle preference assessment
- Expanded and updated the list of career opportunities in physical education, exercise science, and sport
- Expanded information on athletic training and physical therapy
- Added research box on the competences needed by sport managers
- Added information on sport marketing and promotions
- Enhanced quality of pictures
- Added new and updated suggested readings

## **Chapter 6 Preparation for a Career**

- Added information on goal setting
- Added timeline for pursuing an internship or job
- Updated certifications and their descriptions
- Enhanced quality of pictures
- Added new and updated suggested readings

## **Chapter 7 Sport in the Ancient World and Our European Heritage**

- Expanded information about early cultures
- Added questions to help students gain a better understanding of the history of Greek athletics
- Added definitions of several key terms to help students understand these more clearly
- Revised and updated Web resources
- Added timeline to show relationships from prehistoric to modern times
- Added questions to help students gain a better understanding of the history of gymnastics and sports in Europe
- Added a new career perspective
- Added new and updated suggested readings

## **Chapter 8 Early American Physical Education and Sport**

- Added questions to help students gain a better understanding of the history of early sports in the United States
- Added questions to help students gain a better understanding of the battle of the systems
- Revised and updated Web resources
- Added timeline for the 1800s in the United States
- Added new and updated suggested readings

## **Chapter 9 Twentieth-Century Physical Education and Sport**

- Added definitions of several key terms to help students understand these more clearly
- Revised and updated Web resources
- Added a timeline for the twentieth century that provides examples of key events in physical education, sports, and physical activity for each decade
- Added a new career perspective
- Added new and updated suggested readings

## **Chapter 10 Opportunities and Challenges in Physical Education and Exercise Science**

- Revised and updated the program adherence factors and physical activity tips
- Added research box with resources for conducting research in the exercise and sport sciences
- Revised and updated the competencies of physical education teachers
- Revised and updated Web resources
- Revised and updated the signs and symptoms of burnout and how to deal with burnout
- Added information on violence in schools
- Enhanced quality of pictures
- Added a new career perspective
- Added new and updated suggested readings

## **Chapter 11 Issues in Sports**

- Expanded the information on nutritional supplements and sport performance
- Revised and updated the threats to the integrity of sport
- Updated information on Title IX
- Added information about organizations that support youth sport
- Updated information on intercollegiate athletics
- Updated information on drug testing
- Revised and updated Web resources
- Enhanced quality of pictures
- Added new and updated suggested readings

## **Chapter 12 Living Actively in the Twenty-First Century**

- Revised and improved section on leadership
- Revised and updated Web resources

- Enhanced quality of pictures
- Added new and updated suggested readings

## **Appendix A Selected Physical Education, Exercise Science, and Sport Journals**

- Revised and updated professional journals along with contact addresses, Web sites, and types of articles

## **Appendix B Certifying Organizations**

- Revised and updated list of certifying organizations

## **Glossary**

- Added over 30 new definitions of key terms and made improvements in several definitions

## **CONTENT DESIGN**

Written in a conversational and personal style, *Introduction to Physical Education, Exercise Science, and Sport Studies* is designed for students enrolled in their first course related to exercise science, sport management, physical education, athletic training, or other related majors.

An overview of the field is stressed rather than an in-depth examination of the disciplinary areas. The relevant topics discussed include practical suggestions for selecting and obtaining a job in the chosen career; current issues affecting job selection; girls and women in sport; ethnic minorities in physical education and sport; the standards and assessment movement; teacher, coach, athletic trainer, and exercise specialist certifications; educational values of sports; and the importance of physical activity for all.

The book's three units are self-contained and may be read in any order, although each is important to a full understanding of the field. Unit One provides foundational information in the first four chapters before focusing on careers. As defined in Chapter 1, physical education is a *process through which an individual obtains optimal physical, mental, and social skills and fitness through physical activity*. Exercise science is broadly defined as the *scientific analysis of the human body in motion*. It encompasses exercise physiology, biomechanics, kinesiology, anatomy, physiology, motor behavior, and athletic training. Sports are operationally defined as *physical activities governed by formal or informal rules that involve competition against an opponent or oneself and are engaged in for fun, recreation, or reward*. The cognitive, affective, and psychomotor development objectives of physical education, exercise science, and sport indicate how these can contribute to improvements in quality of life for all. Chapter 2 provides an in-depth look at the exercise and sport sciences, such as exercise physiology, athletic training, and sport management. An explanation of organizations in the field precedes a discussion about preparation programs for school and nonschool careers in Chapter 3. The five traditional philosophies and a discussion of ethics



are presented in Chapter 4 and provide reference points for the development of a personal philosophy.

A career emphasis is integrated throughout and given special attention in Chapters 5 and 6. Chapter 5 describes more than 80 careers in education, recreation, fitness, sports, business, and athletics. Students learn about job responsibilities, prerequisite education and preparation, and potential availability of positions. Chapter 6 provides practical ideas for preparing for careers, with an emphasis on the importance of internships, volunteer experiences, and obtaining certifications. Recommendations for writing a résumé, developing a portfolio, and seeking a job are provided.

Unit Two covers the history and development of physical education, exercise science, and sport from early cultures through today. Athletics in Athens and Sparta, European gymnastics programs, and sports and games in Great Britain are emphasized in Chapter 7 in terms of their influence on programs in the United States. In Chapter 8, early American physical education, exercise science, and sport are traced from early sporting diversions through the formalized gymnastics programs of the late 1800s. Chapter 9 completes the chronology of evolving programs that are diverse in philosophy, clientele, and activity.

Unit Three describes issues and trends in physical education, exercise science, and sport. Chapter 10 examines the value of physical activity for everyone; exercise science program developments; curricular features of elementary, middle, and secondary school physical education; challenges facing physical educators; standards and accountability; legal liability; and career burnout. The beneficial outcomes and associated issues of sports for girls and women, ethnic minorities, senior citizens, individuals with special needs, youth, school and college students, and Olympic athletes are addressed in Chapter 11. The final chapter takes a current and futuristic look at the image and role of physical education, exercise science, and sport in society.

## **SUCCESSFUL FEATURES**

### **Key Concepts**

Each chapter begins with statements that highlight the major topics to be discussed. These provide students with a focus and direction for framing the key ideas to learn.

### **Introductions**

The first paragraphs in each chapter briefly set the stage for and preview the content. They help students gain further perspective on the relevance of the most salient points.

### **Illustrations**

More than 130 photographs help students see the diversity of physical education, exercise science, and sport and potential careers in these fields. The photographs also reemphasize the popularity of sports and activities for all and help reinforce important concepts. Several line figures also help explicate the content.

## **Boxed Material**

Throughout the text, specially highlighted information is designed to enhance students' understanding and provide additional insights into the profession. The insights contained in these boxes expand on and add significantly to the information provided in the text.

## **Definition Boxes**

Definitions of key terms are boxed throughout the chapters at their first mention to reinforce meanings and for ease of studying.

## **Web Connections**

Each chapter provides students with annotations about content that can enhance learning at the URLs provided.

## **Summaries**

A summary paragraph at the conclusion of each chapter emphasizes the primary areas of importance, thus complementing the initial key concepts. These summaries help students focus on the major items presented.

## **Career Perspective**

A unique feature of this book is the integration of biographical sketches of sport, exercise science, and physical education professionals in several diverse careers. The featured individuals list their job responsibilities, hours, course work, and degrees, discuss experiences needed for their careers, describe satisfying aspects of their careers and job potential, and offer suggestions for students.

## **Review Questions**

To enhance retention of each chapter's content, students are encouraged to answer the review questions. Rather than seeking rote memorization of facts, these questions stress understanding key concepts.

## **Student Activities**

Like the review questions, student activities encourage students to think about and use the chapter content in greater depth and to extract practical ideas for career application. These activities also encourage active participation in the learning process.

## **Suggested Readings**

Suggested readings furnish students with additional information and potential resources for further study. The annotations are beneficial for expanding students' knowledge.

## Appendixes

An appendix of professional journals, mailing addresses, Web sites, and foci provides easy references for purchasing these periodicals or learning more about their availability. A second appendix gives addresses for several organizations that certify coaches, athletic trainers, and fitness leaders.

## Glossary

A comprehensive glossary of important terms reinforces students' understanding of the terminology used in the book and in physical education, exercise science, and sport.

## Online Learning Center ([www.mhhe.com/lumpkin7e](http://www.mhhe.com/lumpkin7e))

This Web site offers resources for both students and instructors. For Instructors, resources include an Instructor's Manual, Test Bank, and PowerPoint presentations. The manual includes practical teaching suggestions, chapter overviews, instructional objectives, and chapter outlines. Also for each chapter, there are suggestions for guest lecturers, resource books, helpful Web sites, and recommended videos/DVDs. The Test Bank contains more than 450 multiple choice, true/false, matching, and essay test items with answer keys, and suggested audiovisual materials.

McGraw-Hill's EZ Test is a flexible and easy-to-use electronic testing program. The program accommodates a wide range of question types. Multiple versions of the test can be created, and any test can be exported for use with course management systems such as Web CT, Blackboard, or PageOut. The program is available for Windows and Macintosh environments.

Comprehensive and extensively illustrated PowerPoint presentations for each chapter accompany the text. These PowerPoint presentations may be converted to outlines and given to students as a handout. You can easily download the PowerPoint presentations from the McGraw-Hill website at [www.mhhe.com/lumpkin7e](http://www.mhhe.com/lumpkin7e). Adopters of the text can obtain the login and password to access these presentations by contacting their local McGraw-Hill sales representative.

Resources for the student include flashcards, Internet activities, and interactive quizzes as well as links to online resources and career opportunity information.

## ACKNOWLEDGMENTS

Without the help of numerous individuals, this book would not exist. First and foremost, my parents, Janice and Carol Lumpkin, instilled in me a love for learning, provided me with many educational opportunities through personal sacrifice, and continually encourage all of my endeavors. I dedicate this book to them with my love. My sister, Vernell Berry, and my brother, Phillip Lumpkin, who are also dear friends, and their families provide me with love and encouragement, too.

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***Angela Lumpkin***

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