

# PHYSICAL EDUCATION, HEALTH, AND RECREATION

Johnson Gymnasium  
(616) 471-3253  
physical-ed@andrews.edu

## Faculty

Lydia I. Chong, Chair  
Barbara K. Friesen  
Randall Lonto  
Gregory Morrow  
John R. Pangman

Academic Programs	Credits
BS: Physical Education	42
Exercise Science Emphasis	42
Instructional Leadership Emphasis	42
Minor in Exercise Science	24
Minor in Instructional Leadership	26

The Physical Education Department offers a Bachelor of Science degree in Physical Education with two areas of emphasis—Instructional Leadership or Exercise Science.

The Exercise Science emphasis provides a strong science-based education for the student of exercise and sport. This program provides an excellent foundation for students seeking clinical careers in physical therapy, medicine, and athletic training as well as for the student planning to continue with graduate study in exercise science, sports management, biomechanics, exercise physiology and kinesiology. Students should qualify to take the American College of Sports Medicine (ACSM) certification exams as an Exercise Technologist or Health and Fitness Instructor. Other organizations offering certifications are the International Dance Exercise Association (IDEA) and the National Strength and Conditioning Association (NSCA). A major or minor in Exercise Science also prepares the student for work in the community and/or corporate fitness setting.

The Instructional Leadership emphasis prepares students to work in educational setting—elementary, secondary, YMCA/YWCA, or other areas in which instruction is the main focus.

An Instructional Leadership minor helps students prepare for elementary or secondary teacher certification.

## Undergraduate Programs

### DEGREE REQUIREMENTS

**Physical Education Core:** PETH130, 210, 276, 306, 360, 370, 470

**Cognate Core:** BIOL111, 112, 113; FDNT230; HLED170, 420; PHYS131 or high school physics; STAT285.

### BS: Physical Education—42

Includes the Physical Education Core and a minimum of 24 additional credits fulfilled with one of the two options listed below.

#### Option 1: EMPHASIS IN EXERCISE SCIENCE.

Three (3) Business Management Elective credits: PEAC116, 214; PETH425, 435, 450; **plus** 5 elective Physical Education Activity credits.

#### Option 2: EMPHASIS IN INSTRUCTIONAL LEADERSHIP

EDTE457; PEAC300, 350; PETH266, 280, 307, 335, 366, 459, 460; plus 6 elective physical Education activity credits (1.5 credits must be in Team sports and 2 credits in Individual sports; 2 credits in Intermediate skill level; .5 credit in Gymnastics or Tumbling)

### Minor in Physical Education—24-26

**Cognate Core:** FDNT230, HLED170

#### Option 1: EXERCISE SCIENCE (24 credits)

Physical Education Core plus PEAC116, 214; PETH425, 435

#### Option 2: INSTRUCTIONAL LEADERSHIP (26 credits)

EDTE457; PETH130, 266, 276, 360, 370, 459; plus 5 elective Physical Education activity credits. (For elementary or secondary teacher certification)

## Courses

(Credits)

See inside front cover for symbol code.

### ACTIVITY

#### PEAC106

Alt \$ (.5)

#### *Beginning Basketball*

Instruction in the fundamental skills of shooting, passing, ball-handling, man-to-man defensive play, basic rules, offensive strategy, basic rules, and team play. *Spring* (odd years)

#### PEAC107

Alt \$ (.5)

#### *Beginning Volleyball*

Instruction in the basic skills of serving, setting, passing, and spiking, and the basic instruction on rules, and 2, 3, 4, and 6 person team play. *Spring* (odd years)

#### PEAC108

(.5)

#### *Beginning Self-Defense*

A systematic analysis of self-defense techniques emphasizing mental preparation and survival mind set. Includes basic survival skills, de-escalation techniques, role playing, and lab work. *Fall, Spring*

#### PEAC109

Alt \$ (.5)

#### *Beginning Softball*

Instruction in the fundamental skills of throwing, catching, base-running, batting, and fielding of ground and fly balls. Position play, game situation drills, scrimmages, and rules are covered. Student must supply own glove. *Fall* (even years)

#### PEAC116

\$ (.5)

#### *Weight Control and Conditioning*

Study of the factors involved in increasing, decreasing, or retaining

body weight. Also the practice of exercises designed to control body weight. *Spring*

**PEAC118** Alt \$ (.5)

***Beginning Badminton***

Analysis and practice of basic strokes, singles and doubles play, strategy, and rule interpretations. *Fall* (even years)

**PEAC119** Alt \$ (.5)

***Beginning Tennis***

Instruction in the fundamental skills of ground strokes, serving, and team play. Basic strategy and rules. *Fall* (odd years)

**PEAC120** \$ (.5)

***Scuba***

An entry level course in scuba diving. Includes instruction in the buddy system, dive planning, donning and removing equipment in the water, alternate air sources, buddy breathing, entries, communication, and navigation. Swimming pretest required. YMCA certification. *Spring*

**PEAC125** (.5)

***Canoeing***

Freesport canoeing with emphasis on precise canoe handling through paddle control. Based on traditional strokes modified with special enhancements to produce efficient paddling technique and self expression.

**PEAC128** Alt \$ (.5)

***Beginning Golf***

Study of the basic techniques of the golf swing. An introduction to the game, rules, and etiquette of golf. Students must supply their own equipment. *Fall* (even years)

**PEAC129** \$ (.5)

***Beginning Racquetball***

Introduction to basic strokes, singles and doubles play, strategy, and rule interpretations. Student must supply own racquet, balls, and eye guards. *Fall, Spring*

**PEAC130** \$ (.5)

***Special Activities***

Special areas beyond normally offered courses: cycling, diving, fitness games, fitness swimming. Repeatable in different areas. Consult the current class schedule for activities offered each year. *Fall, Spring*

**PEAC144** Alt \$ (.5)

***Beginning Floor Hockey***

Introduction to the game, including team composition, rules, and fundamental skills. *Spring* (odd years)

**PEAC150** \$ (.5)

***Swimming***

Designed for multilevel instruction. Three basic levels are incorporated into the class based on a swimming pretest: beginners, intermediate, and advanced. Repeatable. *Fall, Spring*

**PEAC206** Alt \$ (.5)

***Intermediate Basketball***

Analysis of and drills in fundamental skills, offensive and defensive strategies. Emphasis is given to team play. Prerequisite: PEAC106 or equivalent. *Spring* (odd years)

**PEAC207** Alt \$ (.5)

***Intermediate Volleyball***

Instruction in advanced team play, offensive and defensive strategies. Game scrimmages will help to perfect fundamental skills. Prerequisite: PEAC107 or equivalent. *Spring* (odd years)

**PEAC208** (.5)

***Intermediate Self Defense***

Technical application of the physical aspect of self-defense techniques. Instruction includes proper technique utilization, de-escalation techniques, role playing, and lab work. Prerequisite: PEAC108. *Spring*

**PEAC209** Alt \$ (.5)

***Intermediate Softball***

Instruction in team play, cutoffs, relays, and offensive and defensive strategies. Game scrimmages use the pitching machine. Students supply own glove. Prerequisite: PEAC109 or equivalent. *Fall* (even years)

**PEAC210** \$ (.5)

***Personal Fitness Plan***

A study of basic-fitness concepts and principles in conjunction with a personalized year-long exercise program for disease prevention and health maintenance. Short readings are required weekly. Students will receive a grade for this class at the end of Spring semester. *Fall*

**PEAC214** \$ (.5)

***Weight Training and Conditioning***

Instruction in body development and coordination activities for men; weight lifting and individual calisthenic program; and body development and shaping for women. *Fall, Spring*

**PEAC228** Alt \$ (.5)

***Intermediate Golf***

Analysis of and drills in chipping, pitching, and putting. Emphasis on refining the golf swing. Students supply their own equipment. Prerequisite: PEAC128 or equivalent. *Fall* (even years)

**PEAC229** \$ (.5)

***Intermediate Racquetball***

Perfection of fundamental skills and strategy. Prerequisite: PEAC129 or equivalent. *Fall, Spring*

**PEAC230** Alt \$ (.5)

***Tumbling***

Learning and performing the fundamental skills of tumbling and balancing with emphasis on teaching methods. *Fall* (odd years)

**PEAC244** Alt \$ (.5)

***Intermediate Floor Hockey***

Analysis of and drills in fundamental skills, position play, and team strategies. Emphasis given to team play. *Spring* (odd years)

**PEAC289** Alt \$ (.5)

***Gymnastics***

Learning and exploring basic gymnastic skills on the following apparatus: horizontal bars, uneven bars, parallel bars, balance beam, rings, and vaulting horse; with emphasis on progression and safety. *Fall* (even years)

**PEAC300** (1)

***Lifeguarding***

Instruction in accident prevention, aquatic facility supervision, and water-rescue techniques. Successful completion results in

American Red Cross Lifeguard Training certification. Current first aid and CPR certification included. Prerequisite: Ability to swim 500 yards in 10 minutes or less. *Fall*

**PEAC330** Alt \$ (.5)  
**Wilderness Living**

Instruction in camping and survival techniques, open fire cooking, orienteering, backpacking, wilderness first aid, edible wild plants, and tracking. Students supply their own equipment. One weekend trip required. *Spring*

**PEAC350** (1)  
**Water Safety Instructor**

Instruction in techniques for teaching American Red Cross swimming courses. Current first aid and CPR certification required. Prerequisite: PEAC300 or current American Red Cross Lifeguard Training certification or current Community Water Safety certification. *Spring*

## THEORY

**HLED130** \$ (2)  
**Essentials of Wellness**

Enhances understanding of individual and public-health issues such as disease prevention, and addresses physical, mental, spiritual, and emotional health. Weekly: 2 lectures and 1 lab. *Fall, Spring*

**HLED170** (1)  
**First Aid and Cardiopulmonary Resuscitation**

Emphasizes the immediate and temporary care of a victim of accident or sudden illness until medical help can be obtained. *Fall*

**HLED420** Alt (3)  
**Ministry of Healing**

A study of the ways in which optimum health is obtained and how it affects the lifestyle and strengthens the total person physically, mentally, socially, and spiritually. E. G. White's counsel on holistic health is emphasized. *Spring* (even years)

**PETH130** Alt (2)  
**Foundations of Physical Education**

Study of physical education as a career, its relationship to related fields of education, general principles and philosophies, historical background, and professional preparation. *Fall* (odd years)

**PETH210** Alt (2)  
**Motor Learning**

Survey of the theories and experimental studies in motor learning. *Fall* (even years)

**PETH266** Alt (2)  
**Recreational Supervision:**

Study of rules and officiating mechanics for team sports. Physical-education majors or minors seeking teaching certification must repeat until all areas have been completed. *Fall*: Flag Football, Volleyball and Basketball. *Spring*: Floor Hockey, Softball and Soccer. Two lab hours per week required. *Fall, Spring* (even years)

**PETH276** Alt (2)  
**Athletic Injury Prevention**

A study of the prevention and care of athletic injuries: Prerequisites: HLED170 or BIOL111, 112, 113 or equivalent. *Spring* (odd years)

**PETH280** Alt (1)

**Introduction to Recreation**

A survey of recreation services, their goals, activities, achievements and work opportunities. *Spring* (odd years)

**PETH306** Alt (3)

**Measurements and Evaluation**

Application of descriptive and inferential statistics to Physical Education and Exercise Science. Prerequisite: STAT285. *Spring* (even years)

**PETH307** Alt (2)

**Adaptive Physical Education**

Study of structural and functional handicapping conditions found in school-age children, the limitations imposed by these conditions, and the responsibilities of the physical education teacher in working with such disabilities. *Spring* (even years)

**PETH335** Alt (2)

**Principles and Practices of Coaching**

A study and discussion into sports-team organization, recruiting, picking teams, training, game preparation, travel budget, crowd control, facilities management, fund raising, game safety and control, and coaches' decorum. Special emphasis will include keeping the game in a "Christian perspective" and establishing a personal coaching philosophy. *Fall* (odd years)

**PETH360** Alt (5)

**Physiology of Exercise**

Theoretical study of the body's physiological response to exercise and its practical application. Prerequisites: BIOL111, 112, 113, or equivalent. Weekly: 4 lectures and 1 lab. *Fall* (even years)

**PETH366** Alt (.5)

**Officiating:**

Practical field experience in officiating. Two labs per week required. Physical Education majors seeking secondary teacher certification must repeat until all areas have been completed. *Fall*: Flag Football, Volleyball and Basketball. *Spring*: Floor Hockey, Softball and Soccer. Prerequisite: PETH266. *Fall, Spring* (odd years)

**PETH370** Alt (3)

**Kinesiology**

The science of bodily movement with emphasis on anatomy, joint and muscular mechanism, principles of force generation and absorption, stability and balance, speed and acceleration in physical activities. Also includes the analysis of activities for the purpose of improving physical skill. Prerequisites: BIOL111, 112, 113 or equivalent and PHYS131. *Fall* (odd years)

**PETH425** Alt (3)

**Biomechanics**

An examination of the internal and external physical forces acting on human movement and the effects produced by these forces. Prerequisite: PETH370. *Spring* (odd years)

**PETH435** Alt (2)

**Graded Exercise Testing**

Explores the principles involved in testing individuals for cardiovascular function using the treadmill. Includes contraindications to graded-exercise testing, basic electrocardiography, medication, and patient preparation. Forms a solid foundation for the American College of Sports Medicine's Exercise Test Technologist

certification. Prerequisite: HLED170, PETH375, and current CPR.  
*Fall* (odd years)

**PETH440 (1-3)****Topics in \_\_\_\_\_**

Selected topics in the area of physical education, health, or recreation. Consult current class schedule for topic offered each year. Repeatable in different content areas. *Fall, Spring*

**PETH450 (1-10)****Practicum in Health, Physical Education, and Recreation**

Supervised experience in area health, fitness, and rehabilitation programs. Limited to junior or senior departmental majors. Graded S/U. *Fall, Spring*

**PETH459 Alt (3)****Secondary Methods in Teaching Physical Education**

The application of teaching principles and strategies as they apply to Secondary Physical Education. Should be taken the senior year. *Fall* (even years).

**PETH460 Alt (1)****Organization and Administration of Physical Education**

Techniques and methods of administration and organization of a physical education department. Areas include facility management, supervision of workers, budgeting, intramural organization, public relations, and legal issues. Should be taken the senior year. *Spring* (even years)

**PETH470 Alt (1)****Seminar in Physical Education and Health**

Explores current issues relevant to physical education and health, by presentations, readings, and projects. Prerequisites: PETH306, 360, 370. *Fall* (even years)

**PETH495 (1-4)****Independent Study/Reading/Research/Project**

*Independent Study:* Directed study in an area of interest resulting in a formal term paper.

*Independent Readings:* Weekly meetings with the instructor for individual assignments and reports.

*Independent Research:* Design and execution of an experiment or causal-comparative research.

*Independent Project:* Practical or creative experience or project in consultation with instructor. Permission required from the instructor and department chair. Thirty hours of involvement required for each credit. Contract of proposed activity required. Repeatable to 4 credits in each area. *Fall, Spring*

# PHYSICAL THERAPY

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**Berrien Springs Campus**

Physical Therapy Building  
Department Administration & Admissions  
(616) 471-AUPT or 800-827-AUPT  
FAX: (616) 471-2867  
pt-info@andrews.edu  
<http://www.andrews.edu/PHTH/>

**MSPT Program**

(616) 471-AUPT or 800-827-AUPT  
FAX: (616) 471-2866

**Dayton Campus**

Andrews University Physical Therapy  
2912 Springboro West, Suite 301  
Dayton, OH 45439-1674  
(937) 298-AUPT or 888-827-AUPT  
FAX: (937) 298-9500

**Faculty**

C. William Habenicht, *Chair*  
Wayne L. Perry, MSPT Program Director  
Daryl W. Stuart, MPT Program Director  
Philip A. Anloague  
John C. Banks  
Kathy A. Berglund  
John Carlos, Jr.  
Heidi C. Clarke  
Norene M. Clouten  
Bonny D. Dent  
Betsy Donahoe-Fillmore  
Edward G. Greene  
Kurt J. Jackson  
Harold L. Merriman  
A. Lynn Millar  
Janet A. Mulcare  
Elizabeth Oakley  
David P. Village

Academic Programs	Credits
<b>Berrien Springs campus</b>	
BS: Anatomy and Physiology (interim degree for MSPT students)	
MSPT: Master of Science in Physical Therapy (5-years that includes BS credits)	174
AMPT: Advanced Master in Physical Therapy	26.5-32.5
ACPT: Advanced Certificate in Physical Therapy	23
<b>Dayton OH campus</b>	
MPT: Master of Physical Therapy	78.5

Physical therapy is a health profession dedicated to evaluating, treating, and preventing physical injury and disease. Physical therapists design and implement the necessary therapeutic interventions to promote fitness, health and improve the quality of life in patients. They also become active in consultation, education and research.

Physical therapists work closely with their client's family, physician, and other members of the medical team to help their