

<p>FDNT485 <i>Nutrition and Metabolism</i> Study of the nutrients and their functions within the living cell and the complex organism. Discussion of the major metabolic pathways. Prerequisites: BCHM120, FDNT230. <i>Spring</i></p> <p>FDNT495 <i>Independent Study/Readings</i> Repeatable to 4 credits in independent study and 4 credits in readings on nutrition and dietetics. Consent of instructor required.</p> <p>FDNT498 <i>Research Methods in Dietetics</i> The study of nutrition research design. <i>Fall</i></p> <p>FDNT540 <i>Maternal and Child Nutrition</i> Role of nutrition in human growth and development, with emphasis on prenatal period, infancy, childhood, and adolescence.</p> <p>FDNT545 <i>Community Nutrition Programs</i> Development of nutrition-education programs for community groups emphasizing health promotion. Practicum includes observation and participation in community assessment, planning, implementation, and evaluation of various types of programs. Repeatable to 4 credits.</p> <p>FDNT555 <i>Advanced Human Nutrition I</i> Functions and nutritional metabolism of simple and complex carbohydrates, lipids, amino acids, and proteins. Prerequisite: A course in biochemistry. <i>Fall</i></p> <p>FDNT556 <i>Advanced Human Nutrition II</i> Functions and nutritional metabolism and interactions of fat-soluble and water-soluble vitamins, minerals, and trace minerals. Prerequisite: A course in biochemistry. <i>Spring</i></p> <p>FDNT565 <i>Current Issues in Nutrition</i> Current issues in food safety, diet, and health. Nutritional factors associated with the major chronic diseases of Western society. Prerequisite: FDNT 230. <i>Spring</i></p> <p>FDNT570 <i>Maternal and Child Health</i> Preventive health care and conditions necessary for mother and child well-being in developing countries. Community-based interventions for child survival. Management of maternal and child health programs.</p> <p>FDNT585 <i>Topics in _____</i> Selected topics in the areas of nutrition. Repeatable to 6 credits.</p> <p>FDNT586 <i>Professional Experience</i> Opportunities for unique supervised practical experiences in various organizations to introduce the student to the role of a professional. A maximum of 4 credits per quarter can be taken. Repeatable to 8 credits.</p>	<p>? (3)</p> <p>(1-3)</p> <p>? (2)</p> <p>(2)</p> <p>(2)</p> <p>(3)</p> <p>(3)</p> <p>(2)</p> <p>(3)</p> <p>(3)</p> <p>(2-4)</p> <p>(1-4)</p>	<p>FDNT594 <i>Practicum</i> Practicum in dietetics, available only to AP-4 students. <i>Fall, Spring</i></p> <p>FDNT600 <i>Research Design</i> Criteria for the organization, analysis, and reporting of research in Nutrition. Preparation of a proposal for a master's thesis or project. Prerequisite: FDNT498 or equivalent. <i>Spring</i></p> <p>FDNT648 <i>Workshop</i></p> <p>FDNT680 <i>Research Seminar</i> Individual reports and discussion of recent research data. Repeatable to 4 credits. Consent of instructor required.</p> <p>FDNT690 <i>Independent Study</i> Individual study and/or research. Consent of instructor required. Repeatable to 6 credits.</p> <p>FDNT698 <i>Research Project</i></p> <p>FDNT699 <i>Master's Thesis</i> Repeatable to 6 credits.</p>	<p>\$ (0, 4)</p> <p>(1)</p> <p>(1-4)</p> <p>(1-4)</p> <p>(1-6)</p> <p>(3)</p> <p>(3-6)</p>
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PHYSICAL EDUCATION, HEALTH, AND RECREATION

Johnson Gymnasium
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Faculty
Lydia I. Chong, Chair
Barbara K. Friesen
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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; STAT285

BS: Physical Education—40

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.

Four (4) 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 credit must be in Team sports and 1.5 credits in Individual sports; 1.5 credits in Intermediate skill level; .5 credit in Gymnastics or Tumbling)

Minor in Physical Education —20-24

Cognate Core: FDNT230, HLED170

Option 1: EMPHASIS IN EXERCISE SCIENCE (20 credits)

Physical Education Core plus PETH425, 435

Option 2: EMPHASIS IN INSTRUCTIONAL LEADERSHIP (24 credits)

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

Courses

See inside front cover for symbol code.

ACTIVITY

		PEAC119	Beginning Tennis	\$ (.5)	supply own glove. Prerequisite: PEAC109 or equivalent. <i>Spring</i>
			Instruction in the fundamental skills of ground strokes, serving, and team play. Basic strategy and rules. <i>Spring</i>		
		PEAC120	Scuba	\$ (.5)	
			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. <i>Spring</i>		
		PEAC128	Beginning Golf	Alt \$ (.5)	
			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. <i>Spring</i> (odd years)		
		PEAC129	Beginning Racquetball	\$ (.5)	
			Introduction to basic strokes, singles and doubles play, strategy, and rule interpretations. Student must supply own racquet, balls, and eye guards. <i>Fall</i>		
		PEAC130	Special Activities	\$ (.5)	
			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. <i>Fall, Spring</i>		
		PEAC144	Beginning Floor Hockey	\$ (.5)	
			Introduction to the game, including team composition, rules, and fundamental skills. <i>Fall</i>		
		PEAC150	Swimming	\$ (.5)	
			Designed for multilevel instruction. Three basic levels are incorporated into the class based on a swimming pretest: beginners, intermediate, and advanced. Repeatable. <i>Fall, Spring</i>		
		PEAC206	Intermediate Basketball	\$ (.5)	
			Analysis of and drills in fundamental skills, offensive and defensive strategies. Emphasis is given to team play. Prerequisite: PEAC106 or equivalent. <i>Spring</i>		
		PEAC207	Intermediate Volleyball	\$ (.5)	
			Instruction in advanced team play, offensive and defensive strategies. Game scrimmages will help to perfect fundamental skills. Prerequisite: PEAC107 or equivalent. <i>Spring</i>		
		PEAC208	Intermediate Self Defense	\$ (.5)	
			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. <i>Spring</i>		
		PEAC209	Intermediate Softball	\$ (.5)	
			Instruction in team play, cutoffs, relays, and offensive and defensive strategies. Game scrimmages use the pitching machine. Students		
		PEAC210	Personal Fitness Plan	\$ (.5)	
			A study of basic-fitness concepts and principles in conjunction with a personalized <u>year-long exercise program</u> 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. <i>Fall</i>		
		PEAC214	Weight Training and Conditioning	\$ (.5)	
			Instruction in body development and coordination activities for men; weight lifting and individual calisthenic program; and body development and shaping for women. <i>Fall, Spring</i>		
		PEAC228	Intermediate Golf	Alt \$ (.5)	
			Analysis of and drills in chipping, pitching, and putting. Emphasis on refining the golf swing. Students supply their own equipment. Prerequisite: PEAC128 or equivalent. <i>Spring</i> (even years)		
		PEAC229	Intermediate Racquetball	\$ (.5)	
			Perfection of fundamental skills and strategy. Prerequisite: PEAC129 or equivalent. <i>Spring</i>		
		PEAC230	Tumbling	Alt \$ (.5)	
			Learning and performing the fundamental skills of tumbling and balancing with emphasis on teaching methods. <i>Fall</i> (odd years)		
		PEAC244	Intermediate Floor Hockey	\$ (.5)	
			Analysis of and drills in fundamental skills, position play, and team strategies. Emphasis given to team play. <i>Fall</i>		
		PEAC289	Gymnastics	Alt \$ (.5)	
			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. <i>Fall</i> (even years)		
		PEAC300	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. <i>Fall</i>		
		PEAC330	Wilderness Living	Alt \$ (.5)	
			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. <i>Spring</i>		
		PEAC350	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. *Fall, Spring*

HLED170 Alt (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 (1)
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)
(was RECR280)
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)
(was PETH374, 375)
Physiology of Exercise
Theoretical study of the body's physiological response to exercise and its practical application. Prerequisites: BIOL111,112,113, or equivalent. *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 (2)
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. *Spring* (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: PETH306,370,374. *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*