Department of Kinesiology

The Department of Kinesiology develops skilled Christian leaders in allied health, athletic training, exercise science, physical education, and sport management, with a value system based on spiritual concepts. It also inspires and equips students to lead healthy, active lifestyles through a required self-managed wellness program promoting personal fitness.

The Department offers majors in Allied Health (Pre-Athletic Training, Pre-Occupational Therapy, Pre-Physical Therapy), Exercise Science, Physical Education, and Sport Management. Minors include Coaching and Personal Training.

Kinesiology Degree Programs

General Education/Core Curriculum Requirements for Kinesiology Majors

General education (core curriculum) requirements in the Academic Affairs section of this Catalog.

Allied Health

The Allied Health major prepares graduates for entry into a doctoral level field in either physical therapy or occupational therapy while also offering specifically designed courses for that degree. Graduates are prepared for graduate school in disciplines related to athletic training, occupational therapy, and physical therapy. A Physical Science minor or a Biopsychology minor is included in this major.

Allied Health Program Learning Outcomes. Graduates of the Allied Health program will:

1. Demonstrate effective writing skills. Communicate clearly and effectively to diverse populations Use information technology to facilitate communication Quantitatively analyze data.
2. Critique professional literature related to the field of allied health.
3. Identify critical elements of the bones and muscles involved in human movement and combine the concepts related to anatomy and physiology with biomechanics.
4. Complete certificate or degree as applicable to the career objective.
5. Conduct research and demonstrate effective statistical knowledge and skills related to allied health.

The Allied Health program offers a major in three tracks of study: Pre-Athletic Training, Pre-Occupational Therapy, and Pre-Physical Therapy.

In addition to Evangel’s general education requirements, core courses for Bachelor of Science in Allied Health Studies are:
BIOL 123, 200, 211, 212, 221, 235, 334, 360, 376; CHEM 110, 111, 112; EXER 210, 333, 343, 345, 386, 422, 441, 450, 476, 496; PHYS 110, 211, 212; PSYC 112, 237, 338, 351, 371; Electives (3).

Exercise Science

The Exercise Science major prepares graduates for employment as an exercise
specialist in community, corporate, university
or clinical settings. This program is
remarkably different from other programs in
that it includes theory, extensive hands-on
training, and practical components in a
range of health, fitness, and club
settings. Students are prepared for
successful completion of the National
Council on Strength and Fitness (NCSF)
Certified Personal Trainer (CPT) exam. **This
major includes a Coaching minor** of
19 credits, including BIOL 123, PHED 222,
226, 327, 328, 310 and 410.

**Exercise Science Program Learning
Outcomes**

1. Identify critical elements of the bones
   and muscles involved in human
   movement and combine the concepts
   related to anatomy and physiology
   with biomechanics.

2. Describe physiological concepts
   related to exercise testing (i.e.,
   maximal aerobic testing, anaerobic
   testing, body composition analysis.)

3. Plan and implement developmentally
   appropriate exercise programs

4. Demonstrate knowledge to assess health
   status, choose fitness testing, and
   prescribe exercise programs

5. Demonstrate a working knowledge of
   exercise science principles, theories, and
   techniques.

The **Personal Training minor** serves
students who wish to become personal
trainers or group fitness instructors. The goal
is the preparation of qualified professionals
for the challenges of today’s growing fitness
market.

In addition to Evangel’s general education
requirements, the Personal Training minor
consists of 23 credits, including BIOL 123,
221, EXER 366, 376, 396, 400, PHED
226, and SMGT 200.

**Core Courses for Bachelor of Science
in Exercise Science Studies**

BIOL 101, 123, 221; EXER 210, 345, 356,
366, 376, 396, 400, 422, 441, 476, 496;
PHED 112, 222, 226, 310, 327, 328,
410; PSYC 237; SMGT 124, 200, 222,
324.

**Physical Education**

The Physical Education program enables
students to develop the professional
knowledge, skills, and dispositions to be
effective professionals in teaching and
related fields. This major certifies a student to
teach in grades K-12. Extensive school-based
field work experiences are integrated into
the curriculum.

**Physical Education Program Learning
Outcomes.** In addition to Professional
Education Learning Outcomes, Physical
Education program graduates will:

1. Demonstrate fundamental movement
   skills (locomotor, non-locomotor,
   manipulative) and movement
   concepts; personal fitness.

2. Explain the bioscience (anatomical,
   physiological, and biomechanical)
   and psychological concept of
   movement, physical activity, and
   fitness.

3. Lead developmental, individual, dual,
   and team activities and
developmental games, including
   outdoor activities and non-
   competitive physical activities, as
   well as various types of rhythmic and
dance activities.

4. Explain the relationship of physical
   activity and exercise, nutrition, and
other healthy living behaviors to a healthy lifestyle.

5. Discuss and analyze refinement of basic movement patterns, skills, and concepts

6. Explain conditioning practices and principles; frequency, intensity, time/duration; the short- and long-term effects of physical training.

7. Discuss safety, injury prevention and how to perform and/or access emergency procedures and services.

8. Explain the effects of substance abuse and psycho-social factors on performance and behavior.

9. Demonstrate current technologies and their application in physical education, communication, networking, locating resources, and enhancing continuing professional development.

10. Discuss and analyze consumer health issues related to the marketing, selection, and use of products and services (including the effects of mass media and technologies) that may affect health and physical activity involvement.

11. Demonstrate competency of approved standards and national content standards for physical education.

12. Explain the biological, psychological, sociological, experiential, and environmental factors (e.g., physical growth and development; neurological development, physique, gender, socio-economic status) that impact readiness to learn and perform.

13. Explain individual differences as related to optimal participation in physical activity including concepts such as diversity, disability, multiculturalism, development, gender differences, and learning styles.

14. Assess and select appropriate services and resources to meet diverse learning needs.

15. Select and assess community resources to enhance physical activity opportunities and involvement.

16. Discuss strategies for advocating in the school and community to promote a variety of physical activity opportunities.

17. Explain statutes, regulations, policies, and curriculum guidelines related to physical education, including knowledge of how to access and advocate for policy development.

18. Identify career opportunities in related fields, e.g., wellness, athletic training, exercise science, and sport-related careers.

**Teacher Education Program**

In addition to Evangel’s general education requirements, core courses for Bachelor of Science in Physical Education Studies, Teacher Education majors must complete Professional Education requirements as set forth in the Education section.

A GPA of 2.7 is required for admission to student teaching. In addition to Evangel’s general education requirements, the Professional Education requirements consist of a minimum of 40 education credits:

BIOL 123, 221; EDUC 220, 225, 228, 271, 352, 397, 421, 427, 434, 437, 497; PSYC 237; EXER 345, 441; HLTH 221

PHED 100, 134, 222, 226, 327, 328, 336, 338, 339, 341, 346, 348, 456, 496; PSYC 233 or 237.

**Sport Management**
The Sport Management program prepares those interested in the business and operations of sports programs to administrate activities for both organizations and patrons. Students who imagine a career spent in professional or collegiate sports on the business side should consider this program. A Sport Management degree can provide the reality of working in sports, along with the flexibility of a balanced education based on business as it applies to athletics.

**Sport Management Program Learning Outcomes.** Graduates of the Sport Management Program will:

1. Describe how sport is a medium for integrating gender issues, ethnic and religious diversity, and social behavior.
2. Identify and understand the concepts of strategic planning, resource allocation, and leadership theory of a variety of sport organizations.
3. Describe and apply sport-marketing principles to construct a marketing plan for a local sport entity.
4. Describe the concept and creation of an event including the process of sponsorship solicitation, event staffing, and selection of event location.
5. Identify the various types of sport facilities and describe effective management procedures.

In addition to evangel’s general education requirements, the Sport Management major consists of a minimum of 53 credits.

**Core courses for Bachelor of Science in Sport Management Studies:**
COEM 175, 345; EXER 210, 345; PHED 328; SMGT 124, 200, 222, 300, 315, 324, 422, 496, 497; 6 elective credits from management courses, MGMT 235, 341, 349; 6 elective credits from marketing courses, MRKT 342, 239, 389, 332.

**Coaching Minor.** The purpose of the Coaching program is to train up coaches who are willing and able to educate students on good nutritional and physical behaviors, creating physically active, healthy young people. Its goal is also to create coaches who understand the broad scope of the impact of athletics and who are committed to creating quality experiences, influenced by God’s will and their desire to serve others.

The coaching minor consists of a minimum of 19 credit hours. BIOL 123; PHED 222, 226, 327, 328, 310, 410.

**Kinesiology Courses**

**BIOL 221: Human Structure and Function (3 cr.)** Focuses on musculoskeletal movement and associated peripheral nerves. Designed to meet the needs of students preparing for careers in physical therapy, occupational therapy, chiropractic, or athletic training. 3 hours per week.

**BIOL 376: Basic Neuroscience for Allied Health (3 cr.)** Discusses the human nervous system, with emphasis on the structure and function of human brain, spine and peripheral nerves. The course will also integrate knowledge of normal and abnormal neuroanatomy and neurophysiology into a meaningful basis for understanding movement dysfunction. Topics include the function of nerve cells, sensory systems, control of movement, and neurologic dysfunctions. Prerequisites: BIOL 211, 212, and 221.
EXER 210: Applied Stats and Research Methods in Exercise and Sport (3 cr.) Explains the mathematical basis for statistics, including descriptive measures, probability, and hypothesis testing. Includes applications in exercise and sport science including software to create data sets, run analyses, and produce proper output. Other topics include experimental and non-experimental research design, sampling, hypothesis formulation and testing, power calculation, tests, ANOVA, correlation, simple and multiple regression, and chi square within the context of planning, conducting, and writing and reporting of research in the field of Exercise Science. Prerequisite: Kinesiology Major.

EXER 345: Research Methods (3 cr.) Focuses on analysis of peer reviewed research literature and learn different research techniques and models that implemented during their own research projects. Explains how to extrapolate intelligently information from research, as applied in a clinical setting.

EXER 356: Nutritional Supplements and Ergogenic Aids (3 cr.) Examines the biochemistry of humans in relation to nutrition and exercise. Emphasizes the basic elements of carbohydrate, fat, and protein metabolism, the role of nutrition in providing energy, building/repairing tissues and regulating metabolic processes during sports and the degree to which nutrition may enhance fitness. Discusses prevalent ergogenic aids (based on reputable research) and how they are thought to increase anaerobic and aerobic power (fitness) and athletic performance.

EXER 366: The Theory and Methodology of Resistance Training (3 cr.) Discusses how to plan a system of training that incorporates activities to target specific physiological, psychological and performance characteristics of individual sports and athletes.

EXER 376: Advanced Concepts of Personal Training (3 cr.) Prepares and qualifies students to work as personal trainers. Bridges the gap between exercise science related course work and the practical application skills of personal training. Prerequisite: PHED 226.

EXER 386: Orthopedic Pathology (3 cr.) Develops students’ skills in evaluating orthopedic injuries. Includes identifying common injury, illness and diseases, as well as proper referral procedures.

EXER 396: Personal Training Practicum (6 cr.) Provides field experiences for student trainers to work with clients of various ages, fitness levels, experiences, and goals. Topics include conducting fitness assessments, prescribing appropriate physical exercises, and safely instructing clients in the systematic procedures of executing strength, cardiovascular, and flexibility exercises. Prerequisite: EXER 376.

EXER 400: Exercise Assessment and Prescription (3 cr.) Discusses the application of exercise physiological concepts to exercise prescription and programming including analysis of techniques used for health appraisal, risk stratification and fitness assessment, and evaluation of strategies used to promote physical activity.

EXER 422: Advanced Exercise Physiology (4 cr.) Explains the physiological process that regulate human exercise tolerance. Topics include
bioenergetics, energy expenditure, and functions of the cardiovascular, pulmonary, neuromuscular, musculoskeletal, renal, and neuroendocrine systems, training, environmental influences, ergogenic aids, nutrition, and weight control. Prerequisite: BIOL 221.

**EXER 422: Physiology of Exercise Lab (0 cr.)** Discusses and applies theories and laboratory techniques for assessing human physiological responses to exercise and training.

**EXER 441: Kinesiology (3 cr.)** Explores the mechanical aspects of human motion and the structure and function of these motions in physically active individuals with or without pathological involvement. Prerequisite: BIOL 221.

**EXER 450: Biomechanics of Human Movement (3 cr.)** Examines fundamental biomechanical principles to the human musculoskeletal system. Topics include musculoskeletal mechanics, tissue biomechanics, and quantitative analysis of human movement. Prerequisite: BIOL 221.

**EXER 476: Cardiovascular Functions (4 cr.)** Provides students with the basic concepts of cardiac and pulmonary rehabilitation programs and the knowledge and skills needed to design, implement, and assess progress of rehabilitation programs to return individuals to a healthy state, full functional fitness or athletic performance. Prerequisites: BIOL 211 and EXER 422.

**EXER 496: Professional Seminar in Exercise Science (1 cr.)** Explores the concepts in core courses from each major within the Kinesiology department. Topics include discussion of experiences shared in practicum and field experiences, preparation for certifications and capstone presentations to further the student’s career advancement.

**HLTH 221: First Aid and CPR (3 cr.)** Explains immediate care of injuries and cardiopulmonary resuscitation for cardiac and pulmonary emergencies. Open to all students.

**PHED 100: University Seminar (1 cr.)** Acclimatizes new Evangel students to the University. Encourages the intellectual and practical orientation to the challenges and opportunities of University life and learning. Students learn about the mission of the University and EU20 themes while learning to build relationships within the department, and by attending campus-wide events.

**PHED 134: Principles of Physical Education (3 cr.)** Discusses the history and philosophy of physical education, aims, objectives, and relationship to the total school and community.

**PHED 222: Care and Prevention of Athletic Injury (3 cr.)** Provides entry-level knowledge in the field of sport-related injuries. Topics include units dealing with the history of athletic trainer, basic anatomy of common injuries, and preventative measures to reduce the incidences of injuries, discussion about basic treatment of acute injuries, and discussion of legal and ethical issues. Prerequisite: BIOL 221.

**PHED 226: Techniques of Teaching Fitness and Weight Training (3 cr.)** Introduces principles of fitness and weight training and their application to the classroom and conditioning programs.

**PHED 310: Theory of Coaching I (3 cr.)** Discusses the principles and rules for a select number of major sports and
recreational pursuits at all levels of competitive play.

**PHED 327: Psychology of Sport and Physical Education (2 cr.)** Discusses the psychological basis for play and coaching. Topics include motivations and behavioral patterns of athletes and spectators.

**PHED 328: Sociology of Sport and Physical Education (2 cr.)** Discusses the role of sport and physical education in society. Topics include the influence of sport as a social system and the influence of other social systems on sport.

**PHED 336: Methods of Teaching Secondary Physical Education (3 cr.)** Discusses and provides opportunities to apply materials and methods used in planning and teaching secondary physical education. Prerequisite for EDUC 497.

**PHED 338: Techniques of Individual Activities (3 cr.)** Discusses and provides opportunities to apply skills, techniques, and teaching progression of the individual and dual sports most often included in a physical education program and used as lifetime recreational activities. Prerequisite for EDUC 497.

**PHED 339: Techniques of Team Activities (3 cr.)** Discusses and provides opportunities to apply skills, techniques, and teaching progression of team sports and activities most often included in upper elementary, middle school, and lower secondary school physical education programs. Prerequisite for EDUC 497.

**PHED 341: Evaluation in Physical Education (2 cr.)** Explains basic statistics, measurement, and evaluation procedures and pertinent tests for each facet of physical education, including the effective use of computers. Prerequisite: MATH 124.

**PHED 346: Fundamentals of Rhythmic Movement (3 cr.)** Develops an understanding and appreciation for the importance of movement and dance activities within the overall physical education curriculum and prepares future physical education teachers to effectively plan and teach these activities.

**PHED 348: Methods of Teaching Elementary Physical Education (3 cr.)** Discusses organization and administration of physical education in the elementary schools, emphasizing the needs, characteristics, types of activities, and teaching methods specifically for the elementary age level.

**PHED 410: Theory of Coaching II (3 cr.)** Introduces the art and science of coaching including a positive coaching philosophy, principles of coaching as digested from the fields of sport psychology, pedagogy, physiology, medicine, and management.

**PHED 456: Adapted Physical Education (3 cr.)** Explains the organization and administration of individual physical education programs for special-needs students, modifications of methods and evaluations for students with specific disabilities and the culturally disadvantaged student.

**PHED 290/490: Readings in Physical Education (1-3 cr.)** These courses are available as needed. Prerequisite: Permission of the department chair and professor required.

**PHED 292/492: Readings in Health (1-3 cr.)** These courses are available as
PHED 293/493: Special Problems (1-3 cr.) These courses are available as needed. Prerequisite: Permission of the department chair and professor required.

PHED 294/494: Travel (1-3 cr.) These courses are available as needed. Prerequisite: Permission of the department chair and professor required.

PHED 496: Professional Seminar in Physical Education (1 cr.) Explores the concepts in core courses from each major within the Kinesiology department. Topics include discussion of experiences shared in practicum and field experiences, preparation for certifications and capstone presentations to further the student's career advancement.

PHED 498: Practicum/Internship (1-3 cr.) These courses are available as needed. Prerequisite: Permission of the department chair and professor required.

PHED 299/499: Directed Research or Projects (1-3 cr.) These courses are available as needed. Prerequisite: Permission of the department chair and professor required.

SMGT 124: Introduction to Sport Management (3 cr.) Introduces students to the basic organizational and business structure of the sport, fitness, and leisure industries. Topics include professional, Olympic, intercollegiate, and exercise/fitness promotion business entities.

SMGT 200: Marketing for Sport (3 cr.) Focuses on marketing principles in sport-related settings. Topics include corporate sponsorships, ticket sales, broadcast agreements, promotional events, and direct marketing in the sport entertainment, participation, and goods sectors of the industry.

SMGT 222: Sport Facility Management (3 cr.) Discusses facility management topics such as mission development; funding and budgeting, site selection, planning, and design; mathematical calculations; scheduling principles, procedures, and thought processes involved in the organizing and conducting of sport tournament and events. Prerequisite: SMGT 124.

SMGT 301: Sport Practicum (1 cr.) Provides an opportunity for students to find a practicum experience to begin to gain experience and establish a network community for employment preparation. Prerequisite: SMGT 124.

SMGT 302: Sport Practicum (2 cr.) Provides an opportunity for students to find a practicum experience to begin to gain experience and establish a network community for employment preparation. Prerequisite: SMGT 124.

SMGT 303: Sport Practicum (3 cr.) Provides an opportunity for students to find a practicum experience to begin to gain experience and establish a network community for employment preparation. Prerequisite: SMGT 124.

SMGT 315: Sport Event Management (3 cr.) Explores foundations of event management. Topics include staffing, budgeting, financing, promoting, securing, and managing. Prerequisite: SMGT 222.

SMGT 324: Organization and Administration of Recreation & Sport
(3 cr.) Analyzes the relationship of sport and management. Topics include sporting goods manufacturers, fitness centers, recreation departments, broadcasting, little league teams, high school, NCAA, and professional leagues. Incorporates four functions of management: planning, organizing, leading, and controlling. Prerequisite: SMGT 315.

SMGT 422: Risk Management in Sport (3 cr.) Examines risk management and related legal issues affecting sport management. Prerequisite: SMGT 124 and 324.

SMGT 496: Professional Seminar in Sport Management (1 cr.) Explores the concepts in core courses from each major within the Kinesiology department. Topics include discussion of experiences shared in practicum and field experiences, preparation for certifications and capstone presentations to further the student’s career advancement.

SMGT 497: Sport Internship (6 cr.) Provides students the opportunity to engage in equivalency of full-time employment in an appropriate agency for a total of 45-50 contact per credit hour. Prerequisites: 90 Practicum hours, SMGT 315, SMGT 422, permission of the coordinator.