Kinesiology

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Description of the Major. The discipline of kinesiology is the study of the art and science of human movement. This organized body of knowledge emphasizes scientific and educational research. General areas of study include the biophysical, sociocultural and behavioral spheres of kinesiology. Within these spheres are numerous subdisciplines, including biomechanics, physiology of exercise, motor learning, psychology of movement, sociology of movement, and pedagogy. The clinical arm of kinesiology includes subdisciplines such as clinical nutrition, clinical exercise physiology and gerontology.

The major curriculum provides a sound liberal arts background and an area of academic specialization. The department offers two tracks: 1) B.S. in Movement and Exercise Science, with particular emphasis in exercise science, pre- physical and occupational therapies, physician assistant, cardiac rehabilitation and other allied health fields and 2) B.S. in Movement and the Medical Sciences, providing coursework for students seeking to gain admission to medical school. and for students interested in pursuing a PhD in KNS related fields.

Distinctive Features of the Major. The kinesiology major gives the student the opportunity to study the many subdisciplines associated with the allied health professions and approach this discipline with a liberal arts and science focus. The internship/research requirement in the major gives students a chance to elect options in the work place (e.g. occupational therapy, physical therapy aid; assisting in the training room; assisting in a medical clinic; community health settings, and research). Seminar and small group discussion, multi-media use, and active learning practices characterize courses.

The Kinesiology Department recognizes the tremendous value of an off-campus experience. In addition to campus-wide programs available to all students, three programs are available which offer unique application to the discipline of kinesiology. Courses in each of these programs meet requirements for the kinesiology major.

The Westmont in San Francisco program offers unique opportunities to select internship experiences in physical and occupational therapy, corporate fitness, strength and conditioning, and physician assistant programs.

Students can take part in a research program hosted at the University of Bath, in Bath, England where kinesiology students participate in several research projects alongside Westmont faculty, University of Bath faculty and doctoral graduate students. Advanced Anatomy is also offered with a week of instruction at the University of Edinburgh in Scotland. Note: This program does not run every summer.

The Westmont Global Health Partnership with Uganda Studies, on the campus of Uganda Christian University (UCU) in Mukono, Uganda, is based on a partnership between Westmont College, UCU's Center for Global Engagement and the Uganda Studies Program (USP) operated by the Council for Christian Colleges and

Universities (CCCU). Global health coursework, including pre and post classes on Westmont's campus and in Uganda, provides a significant global health experience for Westmont and other CCCU students.

Career Choices. The purpose of this liberal arts major is to provide a foundation of understanding and competencies in the discipline with an integrated Christian world view. Career options include: cardiac rehabilitation, coaching, corporate fitness, disability related pursuits, fitness management, gerontology services for older adults, global and public health, graduate studies in the sport or health sciences, medicine, medical technician, nurse practitioner, occupational therapy, personal trainer, physical therapy, physician assistant, sports medicine, and teaching.

Distinctive Features of PEA. Physical education activity classes at Westmont encourage successful psychomotor development and provide a rationale for making exercise a priority in the stewardship of our bodies. Courses give students the skills and principles needed for a physically active life, including an exercise program to maintain physical well-being. The instruction-based program is diverse and developmental, and it encourages healthful, active, lifetime, leisure-based activities.

Requirements for the B.S. Major
Movement and Exercise Science Track: ~~51~~ 53 units

Required Lower-Division Courses: 18 units

KNS/BIO 011 Human Anatomy (4)
KNS/BIO 012 Human Physiology (4)
KNS/BIO 040 Human Nutrition (4)
KNS 072 Foundations of Kinesiology (2)
MA 005 Introduction to Statistics (4)

Required Upper-Division Courses: 25 units

KNS 101 Biomechanics (4)
KNS 105 Physiology of Exercise (4)
KNS 148 Psychology of Movement (2)
KNS 149 Sociology of Movement (2)
KNS 166 Public Speaking in Kinesiology (4)
KNS 181 Special Populations (4)
KNS 185 Motor Behavior ~~(2)~~ 4
One course from the following: (1)
    KNS 190 Internship (1)
    KNS 198 Research (1)
KNS 195 Senior Capstone (2)

Electives: 8 units

KNS 087 Basic Physics Primer (1)
KNS 110 Cardiovascular Dynamics (3)
KNS 122 Nutrition for the Health Professional (2)
KNS 140 Food Systems (4)
KNS 141 Politics of Sports (4)

KNS 150 Topics Courses (1-4)
KNS 151 Prevention/Treatment of Athletic Injuries (3)
KNS 152 Therapeutic Exercise and Modalities (2)
KNS 155 Fundamentals of Movement (2)
KNS 156 Health Education for the Classroom Teacher (2)
KNS 159 Exploring Public Health (2)
KNS 160 Strength and Conditioning (3)
KNS 161 Fitness for Older Adults (2)
KNS 162 Physical/Psychological/Social Aspects of Aging (2)
KNS 190 Internship (1-4)
KNS 198 Research (1-4)
One course from approved list of Natural and Behavioral Sciences courses (4)

Proposal 1
81
68 units (Proposal 2)

Movement and the Medical Sciences Track: ~~79~~ units

Required Lower-Division Courses: 14 units

KNS/BIO 011 Human Anatomy (4)
KNS/BIO 040 Human Nutrition (4)
KNS 072 Foundations of Kinesiology (2)
MA 005 Introduction to Statistics (4)

Required Upper-Division Courses: 20 units

BIO 102 Physiology (4) or KNS 012
KNS 101 Biomechanics (4)
KNS 105 Physiology of Exercise (4)
KNS 181 Special Populations (4)
KNS 185 Motor Behavior ~~(2)~~ 4
KNS 195 Senior Capstone (2)

Medical Science Courses: ~~45 units~~ → 32 units

BIO 005, 006 General Biology I, II (4,4)
BIO 113 Biochemistry (4)
BIO 114 Genetics (4)
CHM 005, 006 General Chemistry I, II (4,4)
CHM 101, 102 Organic Chemistry I, II (4,4)
~~PHY 011, 013 Physics for Life Sciences I, II (4,4)~~
~~PHY 014 Physics for Life Sciences Laboratory (1)~~
~~PSY 001 General Psychology (4)~~

} Proposal 2

Requirements for a Minor: 24 units

No change

Minor tracks are offered in coaching and movement science.

Movement Science Minor: 24 units

KNS/BIO 011 Human Anatomy (4)
KNS/BIO 012 Human Physiology (4)

KNS 101 Biomechanics (4)
KNS 105 Exercise Physiology (4)
8 units of upper-division kinesiology electives

Coaching Minor: 24 units No change

KNS/BIO 011 Human Anatomy (4)
KNS 101 Biomechanics (4)
KNS 105 Exercise Physiology (4)
KNS 148 Psychology of Movement (2)
KNS 149 Sociology of Movement (2)
KNS 166 Public Speaking in Kinesiology (4)
KNS 190 Internship (2)
One of the following:
KNS 151 Prevention and Treatment of Athletic Injuries (3)
KNS 160 Strength and Conditioning (3)

Preparation for Teaching Physical Education at the Elementary or Secondary Level

Students wishing to teach physical education should complete the regular requirements for the B.S. major. In order to complete a fifth-year Credential Program at Westmont, students should also complete four or more of the following (minimum of 12 units) prior to applying to the program.

KNS 156 Health Education for the Classroom Teacher (2)
ENG 106 Language Acquisition (4)
ED 101 Explorations in Teaching: Secondary (4)
ED 105 Perspectives on Cultural Diversity and Education (4)
ED 130 Special Education for the Classroom Teacher (2)
ED 161 Technology for the Classroom Teacher: Secondary (2)

In many cases, it is possible to complete requirements for the major and the Westmont Credential Program in four years. Such a "fast-track" schedule requires early planning, ideally beginning in the first year. Students wishing to complete such a program should refer to more specific advising materials available on the department webpage.

All students wishing to explore teaching physical education are also strongly encouraged to consult with faculty advisors in the Department of Education as early in their undergraduate program as possible, in addition to their major advisor.

Major Courses
Lower-Division Course Descriptions

KNS/BIO 011 Human Anatomy (4) A systems approach to the study of tissues and organ systems that make up the human body. An emphasis is given to skeletal muscle. Course is designed with careers such as nursing, physician, physician assistant, physical therapy, and sports medicine/personal training in mind. Lab required.