

## **Biomechanics Curriculum (Ph.D.)**

\*Core Courses (Required 20 credits)

### **Course Title/Credits:**

[KHP 615](#) Biomechanics of Fundamental Movements (3)

[KHP 620](#) Advanced Exercise Physiology (3)

[KHP 640](#) Laboratory Methods (3)

[KHP 782](#) Independent Research (3)

PGY 615 or equivalent Teaching Credits (1)

Seminar (4) (1 credit/sem for 4 sem)

### **Related Courses:**

#### **Within Biomechanics:**

[KHP 616](#) Sport Biomechanics (3)

[KHP 617](#) Gait Analysis (3)

[KHP 695](#) Independent Study (3)

[KHP 715](#) Three Dimensional Analysis of Human Movement (3)

#### **Other Departments:**

ANA 802 Neuroanatomy for PT students (2)

ANA 811 Human Anatomy for Allied Health Professions (5)

AT 680 Principles and Applications of Kinesiological EMG (3)

AT 700 Muscle Mechanics (3)

BME 501 Foundations of Biomedical Engineering (3)

BME 530 Biomedical Instrumentation (3)

BME 605 Biomedical Signal Processing I (3)

BME 635 Magnetic Resonance Instrumentation and Measurement (3)

BME 670 Biosolids (3)

BME 672 Musculoskeletal Biomechanics (3)

BME 685 Biofluid Mechanics (3)

CNU 605 Wellness and Sports Nutrition (3)

PGY 412G Principles of Human Physiology (4)

PGY 502 Principles of Systems/Cell Molec Physiology (5)

#### **Research/Statistics (7 credits):**

STA 671 Regression and Correlation

STA 672 Design and Analysis of Experiments

STA 677 Applied Multivariate Methods

STA 679 Design and Analysis of Experiments II