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