PhD Exercise Science (Concentration: Biomechanics)

36 credits of coursework

Statistics (6 credits):

- Basic Stats Course (3 credits) –
  - BST600
  - EDP557
  - STA570
  - Any other basic stats course (500 level or higher)
- Advanced Stats Course (3 credits):
  - BST 661 – Survival Analysis
  - BST 664 – Design of Clinical Trials (Prereq: BST600)
  - BST 681 – Linear Regression (Prereq: BST600)
  - STA674 – Regression Analysis and Design of Experiments
  - STA 677 – Applied Multivariate Methods
  - STA 678 – Statistical Computational Theory and Data Visualization: R and SAS

KHP Area of Concentration (15 credits):

- KHP 615 (3 credits) – Biomechanics of Fundamental Movements
- KHP 715 (3 credits) – 3D Analysis of Human Movement
- KHP 640 (3 credits) – Laboratory Methods
- AT 700 (3 credits) – Muscle Mechanics
- KHP 644 (3 credits)– Research Techniques Applied to KHP

Supporting Electives (15 credits):

- KHP 547 (3 credits) – Psychology of Sport and Physical Activity
- KHP 550 (3 credits) – Principles of Resistance Training
- KHP 600 (3 credits) – Exercise Stress Testing & Prescription
- KHP 620 (3 credits) – Advanced Exercise Physiology
- KHP 617 (3 credits) - Gait Analysis
- KHP 620 (3 credits) - Advanced Exercise Physiology
- KHP 674 (3 credits) - Foundations of Health Promotion
- KHP 690 (3 credits) – Foundations of Performance
- KHP 695 (3 credits) – Independent Study
- KHP781 (3 credits) - Pro Seminar in KHP: Muscle Physiology
- KHP 781 (3 credits) - Pro Seminar in KHP: Physiological Foundations of Performance
- KHP 782 (3 credits) – Independent Research in KHP
- CNU 605 (3 credits) - Wellness and Sports Nutrition
- RHB 714 (3 credits) – Critical Appraisal of Research in Rehabilitation & Health Sciences
- RHB 744 (3 credits) - Advanced Topics in Motor Development
- RHB 720 (3 credits) – Research in Rehabilitation and Health Sciences
- BSC 534 (3 credits) – Ethics and Responsibility in Clinical Research
- BME 550 (3 credits) – Introduction to Biomedical Imaging
- BME 571 (3 credits) – Mechanical Modeling of Human Motion

Up to the advisor and student to decide on electives that fit their academic and research interests.

KHP 785: Graduate Seminar in Exercise Science

- Must register each semester of enrollment and present at least 2 times for a total of 2 credit hours

Minimum of 36 credit hours needed in order to sit for Qualifying Exam