**Exercise Science**

*Exercise Science Department*

**Faculty**
Brian Peterson (chair), Leslie Duinink, Katelin Gannon, Shelli Green, Cody Huisman, David Pavlat, Pam Richards, John Roslien, Sara Shuger Fox

**Statement of philosophy**
Majors in Central’s exercise science program will master the science of exercise utilized in educational, fitness/wellness, sport/performance and therapeutic settings. Students become active learners and acquire the knowledge and skills necessary to meet the challenges of a dynamic world. Existing assessment tools, a comprehensive body of knowledge and communication skills are developed and utilized in a problem solving environment.

Graduates will know how to respond, adjust and adapt to exercise; analyze and evaluate individual physiology performance; design and assess exercise programs in the psychomotor domain; read, interpret and conduct research and have developed an ethic of accountability to improve oneself, interested others and the profession at large.

**Major Communication Skills**
A communication skills from the exercise science department indicates students have achieved college level mastery in both the written and verbal domain. Communication skills will be assessed using predetermined rubric tools in the following classes: EXSC 254, EXSC 257, EXSC 334, and EXSC 460. Students assessed as needing further development will be referred to the department chair for a prescriptive plan to improve their communication skills.

**Major Restrictions:** Students may not declare majors in both exercise science and athletic training.

**Exercise Science Major Requirements (48 credits)**

1. Complete all of the following:
   - EXSC 111 Essentials of Human Anatomy & Physiology with Lab (4)
   - EXSC 149 Foundations of Health and Exercise Science (3)
   - EXSC 151 First Aid and Sports Injuries (3)
   - EXSC 254 Human Anatomy and Kinesiology with Lab (4)
   - EXSC 257 Fitness Assessment and Exercise Prescription (4)
   - EXSC 334 Sport Nutrition (4)
   - EXSC 460 Exercise Physiology (3)
   - EXSC 461 Exercise Physiology Lab (2)

2. Choose 21 s.h. of electives beyond the 100 level with minimum of nine credits at the 300-level or above in EXSC, AT or the following: CHEM 231, CHEM 331, CHEM 351, BIOL 210, BIOL 221, BIOL 341, BIOL 360, EDUC 311, EDUC 314, or MATH 215. (A maximum of 3 credits of 397 or 497 may count for the major.)

**Teaching Licensure**
Students seeking licensure must complete all requirements for the EXSC major, plus the following EXSC courses and the education courses listed in the Education (K-12 Art, Music, P.E.) portion of the catalog or as provided by the education department.

   - EXSC 110 Intro to Stress Management (3)
   - EXSC 120 Theory and Practical Application of Health Related Fitness (3)
   - EXSC 212 Adapted Physical Education (3)
   - EXSC 220 Personal Wellness (3)
   - EXSC 260 Substance Abuse (3)
   - EXSC 261 Community & Consumer Health (3)

**Coaching Endorsement (#101)**
A coaching endorsement is for students who are completing the requirement to be a licensed teacher.

Courses required as per the BOEE:
- EDUC 181 Developmental Psychology (3)
- EXSC 111 Essentials of Human Anatomy and Physiology with lab (4)
- EXSC 151 First Aid and Sports Injuries (3)
- EXSC 213 Principles of Coaching (3)
Recommended courses:
EXSC 254 Human Anatomy and Kinesiology with Lab (4)
EXSC 462 Motor Learning (3)

Coaching authorization
Students who do not anticipate obtaining a teaching license are encouraged to visit the Iowa Board of Educational Examiners for current coaching information at http://www.state.ia.us/boee. A student may receive a coaching authorization without a teaching license. These students will also need to refer to the BOEE website.

Exercise Science Minor Requirements (27 credits)

1. Complete all of the following:
   - EXSC 111 Essentials of Human Anatomy and Physiology with Lab (4)
   - EXSC 149 Foundations of Exercise Science (3)
   - EXSC 151 First Aid and Sports Injuries (3)
   - EXSC 254 Human Anatomy and Kinesiology with Lab (4)
   - EXSC 257 Fitness Assessment and Exercise Prescription (4)
   - EXSC 334 Sports Nutrition (4)
   - EXSC 460 Exercise Physiology (3)
   - EXSC 461 Exercise Physiology Lab (2)