

# Kinesiology

“Practical experiences in professional settings are frequently incorporated in our courses. Students in Exercise and Disease visited a local cancer center to meet with the director and work with patients during a treatment session.”

*Steve DeVries, Kinesiology Professor*

The department of kinesiology offers a range of courses that reflect the interdisciplinary nature of the study of human movement. Cornell offers two specific degree programs in the department of kinesiology: exercise science and physical education teaching, as well as courses that lead to Iowa Department of Education coaching endorsements and authorizations.

The exercise science major is designed to provide students with a solid academic foundation in the psychological and physiological principles of human physical performance. This is a flexible, science-based curriculum that helps prepare students for careers in the health and fitness professions, or for graduate studies in health fields including physical therapy and athletic training. Our students are also prepared for graduate study in exercise science, sport and exercise psychology, occupational therapy, biomechanics, cardiac rehabilitation, and chiropractic medicine.

Those majoring in physical education may apply for teaching licensure at the elementary and/or secondary level. Physical education majors complete courses in methodology, motor learning, anatomy, adapted physical education, and field experiences prior to student teaching. Coursework is available leading to State of Iowa Coaching Authorization licensure, and to Coaching Endorsement (for those who major in education).

## **BENEFITS OF ONE COURSE AT A TIME**

One Course At A Time provides flexibility in class scheduling and diversity in student experiences. Kinesiology courses combine lecture and discussion sessions with lab activities, opportunities for students to engage in practical applications, and a variety of off-campus experiences. Because students enroll in a single course each block, entire courses can visit facilities and professionals at work in the field. Students also have the flexibility to engage in a one- or two-block internship, or work with a faculty member on advanced projects in their areas of interest.

## **CURRICULUM HIGHLIGHTS**

The exercise science major is a flexible, science-based curriculum designed for students pursuing goals including working in the wellness and fitness industry, health professions including pre-medicine and pre-physical therapy, as well as graduate study in exercise science. Initial coursework includes human anatomy, physiology, and psychology. Advanced courses investigate the theoretical and technical aspects of human physical performance within the context of physical fitness, athletic performance, and pathological states with hands-on training using advanced physiological and psychomotor data acquisition systems. We also support students interested in pursuing graduate studies by partnering with Cornell's Dimensions Program for Health Professions.

The teaching concentration emphasizes theory and application of physical education pedagogy, ethics, and administrative concepts associated with teaching at the elementary and secondary school levels. The Cornell kinesiology and education departments work closely together to ensure that students

## *Faculty Bios & Courses*

### **STEVE DeVRIES**

*Professor of Kinesiology*

Teaches a range of courses in kinesiology including Exercise Psychology, Motor Learning, Psychology of Sport, Sports in American Society, and Coaching Endorsement or Authorization. Ph.D., University of Iowa; M.A., Mankato State University; B.A., political science, University of Iowa.

### **JUSTUS HALLAM**

*Assistant Professor of Kinesiology*

Teaches a range of courses in kinesiology including Systems Physiology, Exercise Physiology, Lifetime Fitness and Activity, Nutrition, Exercise Testing, and Prescription and Foundations in Kinesiology. Ph.D. in kinesiology and immunobiology, Iowa State University; B.S., health and performance, Iowa State University.

### **CHRISTI JOHNSON**

*Assistant Professor of Kinesiology*

Teaches a range of courses in kinesiology including Psychology of Sport, Exercise Psychology, Sports in American Society, Foundations of Kinesiology, and Lifetime Fitness and Activity. Ph.D. in the psychology of sport and physical activity, University of Iowa; M.A. in cultural studies of sport and leisure: emphasis sport psychology, University of Iowa; B.S. in psychology and B.A. in Spanish, University of Iowa.



receive optimal preparation for teaching physical education. Students engage in practical, hands-on methods courses, observations of teaching professionals, practicum, and supervised student teaching to qualify for physical education teaching licensure.

The coaching education program develops students' knowledge for successful athletic coaching in secondary schools. Completion of Coaching Endorsement or Authorization and Care and Prevention of Athletic Injuries satisfy requirements for the Iowa Department of Education coaching authorization and endorsement.

#### RESEARCH & INTERNSHIPS

Recent students have taken advantage of our exercise physiology lab to conduct research on the effects of sleep deprivation on physiology and psychology, as well as the physiological response of wrestlers and non-wrestlers to high-temperature training environments. Other recent research topics include a comparative movement analysis of a baseball pitcher's throw, comparing the success rates of allograft versus autograft anterior cruciate ligament repair in adolescents, and use of mental imagery in athletic injury rehabilitation.

Students have held internships with the Cedar Rapids Kernels, University of Iowa Athletics, Iowa Sports Festival, and NBA clinics; fitness and wellness internships with Mercy Medical Center and St. Luke's Hospital, Rockwell Collins, physical therapy offices, and children's hospitals; and recreation and wellness internships with wilderness camps, personal fitness centers, and health clubs.

#### AFTER CORNELL

According to the U.S. Bureau of Labor Statistics, jobs for exercise physiologists (median pay: \$47,010) will grow faster than average over the next seven years, jobs for athletic trainers (median pay: \$44,670) will grow much faster than average, openings for fitness instructors (median pay: \$36,160) will grow about as fast as average, and jobs for physical therapists (median pay: \$84,020) will grow much faster than average.

#### Alumni Careers

Health and physical education teacher, Saudi Arabia (Class of 2016)

Personal fitness trainer, Florida Fitness World, Deltona, Florida (Class of 2015)

Healthcare recruiter, Addison Group, Denver, Colorado (Class of 2015)

Rehabilitation aide, Cora Rehabilitation Clinics, Pompano Beach, Florida (Class of 2015)

Computer science coordinator and instructor, Southwest Applied Technology College, Cedar City, Utah (Class of 2015)

Client relationship specialist, Vanguard, Valley Forge, Pennsylvania (Class of 2015)

Personal trainer, XSport Fitness, Chicago, Illinois (Class of 2015)

Fitness trainer and physical wellness coach, System of Strength, Columbus, Ohio (Class of 2014)

Trainer, Palumbo Performance, Pleasanton, California (Class of 2014)

Assistant soccer coach, North Shore Country Day School, Winnetka, Illinois (Class of 2013)

Physician assistant, Twin Cities Orthopedics, Minneapolis-St. Paul, Minnesota (Class of 2012)

Physician assistant, Physician's Clinic of Iowa, Cedar Rapids, Iowa (Class of 2010)

Research scientist, Eli Lilly and Company, Bloomington, Indiana (Class of 2010)

#### Graduate Schools Attended

Doctor of Physical Therapy and master's in athletic training, Saint Louis University, St. Louis, Missouri (Class of 2016)

M.S., child life, University of South Carolina, Charleston, South Carolina (Class of 2016)

Doctor of Physical Therapy, University of Colorado-Denver, Denver, Colorado (Class of 2015)

Master of Occupational Therapy, Florida Gulf Coast University (Class of 2015)

M.S., exercise and nutrition science, University of Tampa, Tampa, Florida (Class of 2015)

Doctor of Physical Therapy, University of Minnesota, Minneapolis, Minnesota (Class of 2014)

Doctor of Physical Therapy, Thomas Jefferson University, Philadelphia, Pennsylvania (Class of 2014)

M.A., athletic training, Manchester University, North Manchester, Indiana (Class of 2014)

M.S., Eastern Illinois University, Charleston, Illinois (Class of 2014)

Ph.D., clinical psychology, Vanderbilt University, Nashville, Tennessee (Class of 2013)

M.S., physician assistant, University of Wisconsin-La Crosse, La Crosse, Wisconsin (Class of 2012)

Ph.D., public health-health behavior, Indiana University, Bloomington, Indiana (Class of 2010)

## Faculty Bios & Courses

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### KRISTI MEYER

*Assistant Professor  
of Kinesiology*

Teaches a range of courses in kinesiology including Systems Physiology, Exercise Physiology, Anatomy, Nutrition, Exercise Testing and Prescription, and Human Biomechanics. She is an American Physical Therapy Association certified specialist in sports physical therapy, and a certified athletic trainer. D.P.T., University of Minnesota; B.A., Cornell College.

### ELLEN WHALE

*Professor of Kinesiology*

Teaches a range of courses in kinesiology including Foundations of Physical Education, Ancient Greek Athletics, and Women and Sports. She also teaches a variety of Lifetime Fitness and Wellness courses, as well as methods courses in physical education, team and dual sports, and individual sports and wellness activities. She is certified as an American College of Sports Medicine health and fitness instructor. M.S., Eastern Illinois University; B.S., Illinois State University.