REQUIRED COURSES

- **Exercise Science**
  - FNES 211: Introduction to Exercise Training & Program Development
  - FNES 230: Exercise, Energy Balance & Weight Control
  - FNES 340: Kinesiology
  - FNES 341: Biomechanics
  - FNES 342: Physiology of Muscular Activity
  - FNES 352: Physiological Principles of Exercise Training
  - FNES 353: Fitness Assessment & Prescription of Exercise Programs
  - FNES 377: Internship in Exercise Science

- **Nutrition**
  - FNES 263: Nutrition I
  - FNES 264: Nutrition II
  - FNES 337: Nutrition Counseling & Education
  - FNES 361: Sports Nutrition
  - FNES 362: Nutrition for the Exercise Professional

- **Science and Statistics**
  - BIO 40: Anatomy & Physiology I
  - BIO 41: Anatomy & Physiology II
  - CHEM 101.3 and 101.1: Basic Chemistry Lecture/Lab
  - CHEM 102.3 and 102.1: Basic Organic Chemistry Lecture/Lab
  - CHEM 103.3 and 103.1: Basic Biochemistry Lecture/Lab
  - PSYCH 107.3 and 107.1: Statistical Methods

- **Department-Approved Elective**
  One course chosen from a predetermined list to allow for a stronger foundation in the student’s area of interest. Research options are also available.

**Applicable Minors:**

- **Business & Liberal Arts – BALA**
  The minor is designed to teach students in all academic disciplines the business skills necessary to succeed in today’s fast-paced global economy and to do so through an intensive course of study combining analytical, interpersonal, and technological knowledge with hands-on, practical, real-world applications.

- **Health Sciences – HEALTH-MIN**
  The minor is suitable for students planning to pursue a career in the health professions (physical & occupational therapy, nursing, and physician assistant) and who need to complete prerequisite courses required by professional schools that may not be required for their majors at Queens College.

HOW TO APPLY

Information about the Queens College freshman and transfer admissions process is available at [www.qc.cuny.edu/admissions](http://www.qc.cuny.edu/admissions).

Information about the NYS Excelsior Scholarship is available at [www2.cuny.edu/financial-aid/scholarships/excelsior-scholarship-faqs/](http://www2.cuny.edu/financial-aid/scholarships/excelsior-scholarship-faqs/).
Bachelor of Science in Nutrition and Exercise Sciences (NEXSCI-BS)

FNES offers a Bachelor of Science (BS) degree in Nutrition and Exercise Sciences. This major is designed for students who want to specialize in the improvement and maintenance of cardiovascular, metabolic, and musculoskeletal health and sport performance through regular physical activity and healthy dietary habits.

Career opportunities exist in corporate- and hospital-based fitness/wellness programs, community programs in fitness and nutrition for adults and senior citizens, adult health and fitness programs in health clubs, sport performance facilities, and entrepreneurship. With further academic study, students can work in cardiovascular rehabilitation, sports medicine, physical rehabilitation centers, preventive health agencies, and research.

Advisors: Prof. Ann Azzollini
718-997-2710 • aazzollini@qc.cuny.edu

SPECIAL FEATURES

■ **Research Opportunities**
  The Queens College Applied Physiology Laboratory is a large, fully functional exercise physiology lab with state-of-the-art equipment. It includes a Bod Pod air displacement plethysmograph and underwater weighing tank for body composition assessment, a MOXUS metabolic cart, a GE ECG exercise stress test system with a wide treadmill, a Lode electronically braked cycle ergometer, and Monark cycle ergometers. A BioRadio wireless physiological monitor measures ECG, EMG, hand dynamometry, pulse oximetry, temperature, spirometry, and respiration. The ActiGraph GT9X Link accelerometers assess objective physical activity, sedentary behavior, and body position. We also have a Polar station with heart rate monitors and a Polar V800 heart rate monitor with GPS and heart rate variability functionality. Software in the lab includes ActiLife 6, VivoSense 3.0, and BioCapture.

The Queens College Biomechanics Laboratory is equipped with a three-dimensional VICON kinematic system and two force plate forms for full body gait analysis. The lab also has a wireless EMG system. Several kinetic and kinematic research projects are taking place in the lab.

The Queens College Exercise & Aging Laboratory is equipped with research-grade bioelectrical impedance analyzer (InBody 770) to measure body composition, a pneumatic leg press (Kieser) and TENDO unit to measure muscle power, and a Ultrasound (GE Logiq V2) to measure muscle size.

■ **Internships**
  FNES majors are required to complete 100 hours working with trained professionals to gain experience. Students can choose among diverse specialties, such as strength and conditioning, commercial, community, and physical therapy.

■ **Open Lab Practicum**
  Students develop their fitness assessment and exercise training skills under the guidance of the college laboratory technician and faculty.

■ **Professional Development**
  Students have the opportunity to attend or volunteer at two local conferences hosted by the Greater New York Chapter of the American College of Sports Medicine. Full-day conferences in the fall and the spring offer attendees a wide range of lectures and workshops presented by notable professionals across many areas of exercise science.

■ **Certification**
  Upon completion of the degree, additional reviewing, and first aid/CPR certification, students may apply for two important credentials: American College of Sports Medicine’s Exercise Physiologist-Certified (EP-C) exam and National Strength and Conditioning Association’s Certified Strength and Conditioning Specialist (CSCS) exam.