

EXERCISE SCIENCE PROGRAM

Career Opportunities

Human Performance
Health & Wellness Centers
Personal Training
Strength and Conditioning
Corporate Wellness
Cardiac, Pulmonary and
Metabolic Rehabilitation
College/University Fitness Centers



Admissions Process

To learn more about degree programs available,
contact the Admissions Office at (866) 526-6008 or
admissions@norwalk.edu

Contact Information

For more information please contact Program Director
Dr. Paul Gallo at (203) 857-7194 or pgallo@norwalk.edu
or contact Professor Nicole Mendola at (203) 857-7330
or nmendola@norwalk.edu

Exercise Science Facts

“An important mission of the American College of
Sports Medicine (ACSM) is to promote increased
physical activity and fitness to the public. In order to
advance this mission, exercise professionals must be
familiar with existing public health statements that
relate to physical activity and stay abreast of the
evolving scientific literature related to current and
future physical activity recommendations.”

-American College of Sports Medicine

“A large body of laboratory and population based
studies has documented the many health and fitness
benefits associated with physical activity and
endurance exercise training, such as improved
physiologic, metabolic and psychological parameters,
as well as decreased risk of many diseases and
premature mortality.”

-American College of Sports Medicine

Career/Transfer Associate Degree Program

The Exercise Science Program is designated to provide
fundamental and theoretical knowledge as well as
practical skills necessary to assume the role of a
health fitness professional in commercial and clinical
settings. With an emphasis on exercise physiology and
health, the program integrates cutting edge research
with fundamental theories of learning and basic
clinical skills. Graduates of the program will be
prepared for a career in health fitness and will
demonstrate sound communication skills, lifelong
learning, safe and effective care, within their legal
scope, and compassion for those they work with.

Learning Outcomes

- Demonstrate an understanding of human
anatomy and physiology, exercise physiology and
knowledge in holistic wellness model that
promotes health beyond just the physical aspect.
- Demonstrate sound knowledge and clinical skills
needed for health screenings, exercise testing
and exercise prescription with a variety of
populations.
- Demonstrate an understanding of a variety of
public health concerns including physical
inactivity, nutrition, chronic disease and disability
and human performance.
- Develop leadership, interpersonal, and
communication skills which lead to increased
collaboration with a variety of health care
professionals in a multidisciplinary approach to
wellness.
- Practice sound, prudent, and ethical functions
necessary in health fitness and allied health
professions.

Visit Connecticut State Community College
online at www.ctstate.edu

EXERCISE SCIENCE Career Pathway A.S.

General Education Courses (22—23 credits)

ENG 1010—Composition *Credits 3*
MATH 1100 or higher *Credits 3— 4*
ARHX Elective—Arts & Humanities *Credits 3—4*
BIO 1111—Cell Biology w/Organ Systems *Credits 4*
PSY 1011—General Psychology I *Credits 3*
COMM 1301—Public Speaking *Credits 3*
CCS 1001—College & Career Success *Credits 3*

Program Courses (38 credits)

EXSC 1001—Intro to Exercise Science *Credits 3*
EXSC 2030—Exercise Testing
Program Design *Credits 4*
EXSC 2031—Exercise Programming for
Clinical Populations *Credits 3*
EXSC 2032—Aspects of Strength
and Conditioning *Credits 3*
EXSC 2040—Exercise Physiology w/Lab *Credits 4*
EXSC 2050—Kinesiology w/Lab *Credits 4*
EXSC 2095—Field Placement in
Exercise Science *Credits 3*
BIO 1011—Introduction to Nutrition *Credits 3*
BIO 2111—Anatomy & Physiology I *Credits 4*
BIO 2112—Anatomy & Physiology II *Credits 4*
ENG 1020—Composition II and Literature *Credits 3*

Total Credits: 60—62

NOTE: It is required that all students obtain American Red Cross or
American Heart Association CPR/AED at their own expense. The college
will not provide this service. Students are expected to maintain
appropriate certification during their course of study and internship
experience.

EXERCISE SCIENCE Transfer Pathway A.S.

General Education Courses (32—33 credits)

ENG 1010—Composition *Credits 3*
MATH 1200—Statistics I *Credits 3*
ARHX Elective—Arts & Humanities *Credits 3—4*
BIO 1111—Cell Biology w/Organ Systems *Credits 4*
BIO 2111—Anatomy & Physiology I *Credits 4*
PSY 1011—General Psychology I *Credits 3*
HISX Elective—Historical Knowledge *Credits 3*
COMM 1301—Public Speaking *Credits 3*
WRIX—Written Communication II Course *Credits 3*
CCS 1001—College & Career Success *Credits 3*

Pathway Courses (28 credits)

EXSC 1001—Intro to Exercise Science *Credits 3*

You need to take one of the following
EXSC 2031—Exercise Programming for
Clinical Populations *Credits 3*
or EXSC 2010—Sports Nutrition *Credits 3*
(May not be offered at Norwalk location)
or HPE 2040—Introduction to Athletic Training *Credits 4*
(May not be offered at Norwalk location)

EXSC 2030—Exercise Testing and Program Design *Credits 4*
EXSC 2032—Aspects of Strength and Conditioning *Credits 3*
EXSC 2040—Exercise Physiology w/Lab *Credits 4*
EXSC 2050—Kinesiology w/Lab *Credits 4*
BIO 2112—Anatomy & Physiology II *Credits 4*
EXSC 2095—Field Placement in Exercise Science *Credits 3*

Total Credits: 60—61

NOTE: It is required that all students obtain American Red Cross or American
Heart Association CPR/AED at their own expense. The college will not provide
this service. Students are expected to maintain appropriate certification during
their course of study and internship experience.

Course Descriptions

EXSC 1001 - Introduction to Exercise Science

Co-requisite: ENG 1010

Credits 3

This course is designed to be an introduction to the professional field of Exercise Science and the five components of physical fitness. This course relates the human anatomy and physiology, an understanding of exercise and lifestyle to improve one’s overall wellness.

EXSC 2010 - Sports Nutrition

Prerequisite: BIO 1011

Credits 3

This course explores concepts related to nutrition and conditioning for physically active individuals. The nutrition component of the course will include such topics as: micro and macro nutrients, dietary planning (pre/post competition meals/appropriate caloric intake), body composition and endurance/strength training, as well as designing individualized fitness programs.

EXSC 2030 - Exercise Testing and Program Design

Prerequisite: EXSC 1001

Credits 4

Students will be introduced to the general theories and fundamentals of exercise testing and prescription. This course will allow students to administer safe and efficient health risk assessments and test procedures for the health-related components of fitness (aerobic, strength, flexibility, and body composition). Students will also be able to interpret test data and apply it to safe and

EXSC 2031 - Exercise Programming for Clinical Populations

Prerequisite: EXSC 2030

Credits 3

This course is designed to introduce students to theories and techniques of exercise prescription for a variety of special populations (obese, diabetic, arthritic, pregnant, elderly, and the widely symptomatic). Guidelines for appropriate cardiovascular and resistance training for these groups will be discussed in detail. Protocols for prevention, diagnosis, treatment and rehabilitation will be stressed.

EXSC 2032 - Aspects of Strength & Conditioning

Prerequisite: Completion of EXSC 2030

Credits 3

This course will offer the student an understanding of physiological adaptations seen with functional resistance and anaerobic exercise to improve daily function and skill-related health components (power, speed, agility, coordination and balance). Students will be exposed to a variety of scientific principles associated with resistance training design, periodization and functional training.

HPE 2040 - Introduction to Athletic Training

Prerequisite: ENG 1010

Credits 3

An introduction to sports medicine, including the basic concepts and techniques in the prevention, evaluation, treatment and rehabilitation of athletic injuries. The broad spectrum of knowledge necessary to perform these tasks is examined. A lab is intertwined in the educational process of the class, entailing but not limited to taping, on-field care, bracing, splinting, etc.

EXSC 2040 - Exercise Physiology with Lab

Prerequisite: EXSC 2030 and BIO 2111

Credits 4

The purpose of this course is to increase the student’s knowledge and understanding about exercise physiology and the adaptations that occur during exercise. An understanding of how multiple systems of the body respond to acute and chronic exercise. Emphasis is placed on bioenergetics as well as the circulatory, respiratory, endocrine, metabolic and neuromuscular responses of

EXSC 2050 - Kinesiology with Lab

Prerequisite: EXSC 1001 and BIO 2111

Credits 4

This course is designed to give the student a broader understanding of the study of human movement, through application. Students will explore the anatomical structure of each muscle and joint as well as positioning variables, range of motion, and kinematics.

EXSC 2095 - Field Placement in Exercise Science

Prerequisite: EXSC 2030 and special permission from Program Coordinator

Credits 3

This course is designed to combine classroom seminar with student experiences in a fitness setting within the community. Students will learn and experience facility management, assessments, individual and group training sessions, and exercise prescription during clinical hours. The seminar session will cover work-related problem solving, career development, administrative issues and other career related issues in the health fitness industry.

Directions

CT State Community College Norwalk

188 Richards Avenue Norwalk, CT 06854-1655 www.ctstate.edu

I—95 North or South

Take Exit 13. Turn right onto U.S. 1/Connecticut Avenue. At Shell gas station turn left onto Richards Avenue. Proceed 1/2 mile, East Campus on right, West Campus on left.

Merritt Parkway Northbound

Exit 38. Turn right at the end of the exit ramp onto Route 123 South. Take first left onto Nursey Street. Take first left onto Ponus Avenue. Bear right at the fork onto Fox Run Road. Proceed through the traffic light and bear right around Fox Run School. Turn left at the stop sign onto Richards Avenue. Follow Richards Avenue for one mile. East Campus on the left, West Campus on the right.

Merritt Parkway Southbound

Exit 38. Turn right at the end of the exit ramp onto Route 123 North. Take first right after going under the Merritt Parkway overpass onto Nursery Street. Follow the directions above.

Public Transportation to CT State Community College - Norwalk

Norwalk Bus - WHEELS Routes 11, 13 and CT State Norwalk stop in front of the East Campus at 188 Richards Avenue. Morning and evening shuttle buses run between the South Norwalk train station and the campus. See www.norwalktransit.com for schedules.

Stamford Bus - The F-Route 1 Connecticut Transit buses from Stamford stops at the college. For a timetable call (203) 327-7433.



Exercise Science

A rewarding career in developing sound exercise prescriptions for others, while promoting health and fitness



CT STATE
COMMUNITY COLLEGE
NORWALK