

Exercise Science

Help people live healthier lives

Western Monroe & Orleans Counties
WEMOCO
Career & Technical Education Center



Prepare for Personal Training certification while gaining experience with health & wellness, athletics, and rehabilitation professionals.

Topics of Study

- Career Exploration
- Health and Physical Fitness
- Anatomy
- Exercise Physiology
- Pre-Health Screening
- Pre-Exercise Evaluation
- Exercise Testing
- Exercise Nutrition
- Weight Management
- Programming Design
- Anaerobic Training
- Strength Training
- Cardio Training
- Flexibility Training
- Working with Special Populations
- Entrepreneurship

Integrated Academics

- English
- Science
- Health

Licensing / Industry-Based Certifications

- Red Cross First Aid/CPR/AED certification
- Prepare for the American College of Sports Medicine-Certified Personal Trainer Exam (ACSM-CPT)

Work-Based Learning

CTE programs bring students into the workplace for real life experiences. Businesses that support our Exercise Science program:

- Lattimore Physical Therapy
- Genesee Community College
- SUNY Brockport

College Credits

MCC Dual Enrollment -
HED 130: Foundations of Personal Health and Wellness

Articulation Agreements

- Genesee Community College
- Monroe Community College
- Niagara County Community College
- SUNY Canton



Career Paths

All CTE programs correlate to many career paths.

↓ Start Here

- Fitness Trainer
- Physical Therapy Aide

Go Here ↓

with more education & experience

- Massage Therapist
- Physical Therapist
- Chiropractor
- Exercise Physiologist

Explore more:

<https://www.careerzone.ny.gov/>

<https://www.onetonline.org/find/>

WEMOCO
Career & Technical Education Center

WEMOCO Career & Technical Education Center
Monroe 2-Orleans Board of Cooperative Educational Services
Monroe2BOCES.org/cte 585-352-2471
3589 Big Ridge Road, Spencerport, New York 14559



Exercise Science

Employability Profile

Work-Related Skills

Productivity and Accountability

Follows procedures to meet expectations and deadlines

Displays consistent work performance and quality of work

Flexibility and Adaptability

Works effectively in varied roles and responsibilities

Responds well to and implements feedback

Initiative and Self-Direction

Identifies, prioritizes, and completes tasks without direct oversight

Seeks to learn and develop new knowledge and skills

Leadership and Responsibility

Leverages strengths of others to accomplish a goal

Takes ownership of one's work, performance, behavior, and actions

Communication

Articulates thoughts and ideas clearly and effectively through speaking and writing

Practices active listening skills

Collaboration

Works effectively with others

Open and responsive to new and diverse perspectives

Critical Thinking and Problem Solving

Asks questions to lead to better solutions

Identifies possible options and their outcomes

Body Composition Assessments

Calculate BMI

Take anthropometric measurements

Take skin fold measurements

Cardiovascular Endurance Assessments

YMCA step test

Distance run/walk test

1.5 mile-run

1 mile run

Non-exercise based estimation of VO2

Muscular Strength Assessments

1-Rep Max Bench

1-Rep Max Squat

Estimating a 1-Rep Max

Muscular Endurance Assessments

YMCA Bench Press Test

Partial Curl-up test

Prone Double straight Leg Raise Test

Flexibility Assessments

Sit and Reach

Safety

Demonstrate use of sanitizer to sterilize equipment

Demonstrate proper use of weight training equipment in facility

Demonstrate proper use of cardiovascular equipment in facility

Advise a client on how to treat and prevent common fitness injuries

Workout Development

Facilitate a static stretching Warm-up

Facilitate a dynamic stretching Warm-up

Facilitate a body weight exercise routine

Demo and Facilitate a Hip and Lower Back Workout Routine

Demo and Facilitate a Leg Workout Routine

Demo and facilitate a push/pull workout routine

Demo and facilitate an upper/lower workout routine

Individualized Program Design and Special Populations

Develop a Conditioning Program

Develop a Resistance Training Program

Develop a Plyo/Speed/Agility Training Program

Develop a program for Preadolescents

Develop a program for Elderly

Develop a program for Pregnant Women

Develop a program for client with Respiratory condition

Develop a program for client with metabolic concerns

Develop a program for client with Spinal Cord Injury, MS, Epilepsy, and CP

Client Interaction

Demonstrate the ability to set both process and outcome based SMART goals

Facilitate an initial consultation with a client

Practice ethical behavior when working in lab and with clients

Perform a Health appraisal screening

Evaluate Coronary Risk Factors