

**STATE UNIVERSITY OF NEW YORK  
COLLEGE OF TECHNOLOGY  
CANTON, NEW YORK**



**MASTER SYLLABUS**

**COURSE NUMBER: EXSC 401  
COURSE TITLE: Fitness Assessment**

**CIP Code: 31.0505**

**Created by:** Dr. Janet L. Parcell

**School: School of Science, Health, and Criminal Justice  
Department:  
Implementation Semester/Year: Fall 2028**

**A. COURSE TITLE: Fitness Assessment**

**B. COURSE NUMBER: EXSC 401**

**C. CREDIT HOURS (# Hours of Lecture, Laboratory, Recitation, Clinical):**

# Credit Hours per Week	3
# Lecture Hours per Week	2
# Lab Hours per Week	3
Other per Week	

**D. GRADING METHOD:**

A – F	<input checked="" type="checkbox"/>
Pass/Fail	<input type="checkbox"/>
Other:	

**E. WRITING INTENSIVE COURSE:**

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

**F. GER CATEGORY:**

Does the course satisfy a GER category? If so, please select all that apply.

[\(https://www.canton.edu/provost/assessment/ger/\)](https://www.canton.edu/provost/assessment/ger/)

[1-2] Communication	<input type="checkbox"/>
[3] Diversity: Equity, Inclusion & Social Justice	<input type="checkbox"/>
[4] Mathematics & Quantitative Reasoning	<input type="checkbox"/>
[5] Natural Science & Scientific Reasoning	<input type="checkbox"/>
[6] Humanities	<input type="checkbox"/>
[7] Social Sciences	<input type="checkbox"/>
[8] Arts	<input type="checkbox"/>
[9] US History & Civic Engagement	<input type="checkbox"/>
[10] World History & Global Awareness	<input type="checkbox"/>
[11] World Languages	<input type="checkbox"/>

**CORE COMPETENCIES (Required starting in Fall 2026):**

[12] Critical Thinking and Reasoning	<input checked="" type="checkbox"/>
[13] Information Literacy	<input checked="" type="checkbox"/>
[14] Civic Discourse	<input type="checkbox"/>

**G. APPLIED LEARNING COMPONENT (High-Impact Practices):**

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

If Yes, select [X] one or more of the following Curricular Attribute categories:  
 HIPs definitions found here: <https://www.suny.edu/applied-learning/resources/>

<b>Capstone</b>	
Creative Works	<input type="checkbox"/>
For-Credit Internship	<input type="checkbox"/>
<b>Practicum</b>	
Practicum [Clinical Placement]	<input type="checkbox"/>
Practicum [Non-Clinical Placement]	<input checked="" type="checkbox"/>
<b>Research &amp; Field Study</b>	
Field Research	<input type="checkbox"/>
Research	<input type="checkbox"/>
Undergraduate Research	<input type="checkbox"/>
<b>Service or Community</b>	
Service Learning	<input type="checkbox"/>
Community Service	<input type="checkbox"/>
Civic Engagement	<input type="checkbox"/>
<b>Study Abroad</b>	
International and Domestic Travel/Exchange	<input type="checkbox"/>
COIL	<input type="checkbox"/>

**H. SEMESTER(S) OFFERED:**

Fall	<input checked="" type="checkbox"/>
Spring	<input type="checkbox"/>
Fall and Spring	<input type="checkbox"/>

**I. COURSE DESCRIPTION:**

Students acquire the knowledge and skills to assess the physical fitness of apparently healthy individuals. Focus of the course is on the four components of physical fitness: cardiorespiratory fitness, muscular fitness, body composition, and flexibility. Hands-on training in assessment for these four components is included during laboratory sessions.

**J. PRE-REQUISITES:** BIOL 218

**CO-REQUISITES:** EXSC 303

**K. LEARNING OUTCOMES:**

Course Student Learning Outcome [SLO]	Program Student Learning Outcome [PSLO]	ISLO & Subsets	GER
a. Demonstrate the ability to effectively screen clients for exercise testing and participation.	4	5	
b. Identify the essential elements of physical fitness testing.	4	5	
c. Compare and contrast various tests used to assess cardiorespiratory fitness, muscular fitness, body composition, and flexibility.	4	5	
d. Accurately assess cardiorespiratory fitness, muscular fitness, body composition, and flexibility using standard, evidence-based tests.	4	5	
e. Employ interviewing techniques that demonstrate respect for the client.	2	4 [ER]	

KEY	<b>Institutional Student Learning Outcomes</b> [ISLO 1 – 5]
ISLO #	ISLO & Subsets
1	Communication Skills Oral [O], Written [W]
2	Critical Thinking <i>Critical Analysis [CA], Inquiry &amp; Analysis [IA], Problem Solving [PS]</i>
3	Foundational Skills <i>Information Management [IM], Quantitative Lit, /Reasoning [QTR]</i>
4	Social Responsibility <i>Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]</i>
5	Industry, Professional, Discipline Specific Knowledge and Skills

KEY	<b>Program Student Learning Outcomes</b> [PSLO] <a href="https://www.canton.edu/sci_health/hefi/outcomes.html">https://www.canton.edu/sci_health/hefi/outcomes.html</a>
PSLO #	PSLO & Subsets
1	Communication Skills
2	Social Responsibility
3	Critical Thinking
4	Professional Competencies

**L. TEXTS:**

ACSM's Guidelines for Exercise Testing and Prescription 12th Ed., ACSM 2025.

ACSM's Exercise Testing and Prescription, 2<sup>nd</sup> Ed., Bayles, Madeline Paternostro, Human Kinetics, IL 2023.

**M. SUGGESTED INSTRUCTIONAL MATERIALS:**

ACSM's Resource Manual for Guidelines for Exercise Testing and Prescription, 7<sup>th</sup> Ed., ACSM, Human Kinetics, IL 2013.

**N. EQUIPMENT:**

Metabolic cart for exercise assessment. Exercise equipment available in the fitness center and/or the EXSC/PHTA lab will be used for lab sessions. Basic assessment tools from the EXSC/PHTA laboratory will also be utilized (i.e. blood pressure cuffs, body composition tools, etc.)

**O. SUGGESTED MEASUREMENT CRITERIA/METHODS:**

Quiz	<input checked="" type="checkbox"/>
Exam: practical	<input checked="" type="checkbox"/>
Assignment	<input checked="" type="checkbox"/>
Other:	<input type="checkbox"/>

**P. DETAILED COURSE OUTLINE:**

- I. Physical Activity and Health
  - A. History and Current Statistics
  - B. Benefits of Physical Activity
  - C. Associated diseases and risk factors
  
- II. Health Screening and Risk Classification
  - A. Screening Tools/Questionnaires
  - B. Risk Analysis/classification
  
- III. Principles of Assessment
  - A. Components of Physical Fitness
  - B. Physical Fitness Testing
  
- IV. Cardiorespiratory Fitness
  - A. Graded Exercise Testing
    - a. Treadmill
    - b. Cycle Ergometer
  - B. Field Exercise Testing
  - C. Aerobic Step Testing
  
- IV. Muscular Fitness
  - A. Strength assessment
  - B. Muscle endurance assessment
  - C. Muscular power assessment
  - D. Special assessments for children and elderly
  
- V. Body Composition
  - A. Body composition assessment methods
  - B. Overweight and obesity trends/causes
  - C. Weight management principles
  
- VI. Flexibility
  - A. Flexibility assessment methods

**Q. LABORATORY OUTLINE:**

- I. Introduction to Physical Activity
  - A. Lifestyle self-assessments
  - B. Special preventive exercise guidelines
  
- II. Health Screening and Risk Classification
  - A. Screening Tools/Questionnaires
  - B. Risk Analysis/classification
  - C. Introduction to basic cardiovascular assessment

#### IV. Cardiorespiratory Fitness

- A. Submaximal exercise testing
- B. Aerobic Fitness Field tests

#### IV. Muscular Fitness

- A. Dynamometers
- B. Dynamic strength tests
- C. Dynamic endurance tests

#### V. Body Composition

- A. Skin fold assessment
- B. Bioelectric impedance assessment
- C. Anthropometric assessment

#### VI. Flexibility

- A. Direct flexibility assessment methods
- B. Indirect flexibility assessment methods