

Tompkins Cortland Community College
Master Course Syllabus

Course Discipline and Number: RECR 230
Course Title: Personal Training and Aerobic Leadership

Year: 2023-2024
Credit Hours: 3

Attendance Policy: *To maintain good grades, regular attendance in class is necessary. Absence from class is considered a serious matter and absence never excuses a student from class work. It is the responsibility of all instructors to distribute reasonable attendance policies in writing during the first week of class. Students are required to comply with the attendance policy set by each of their instructors. Students are not penalized if they are unable to attend classes or participate in exams on particular days because of religious beliefs, in accordance with Chapter 161, Section 224-a of the Education Law of the State of New York. Students who plan to be absent from classroom activity for religious reasons should discuss the absence in advance with their instructors. See college catalog for more information.*

Services for Students with Disabilities: *It is the College's policy to provide, on an individual basis, appropriate academic adjustments for students with disabilities, which may affect their ability to fully participate in program or course activities or to meet course requirements. Students with disabilities should contact the Coordinator of Access and Equity Services, to discuss their particular need for accommodations. All course materials are available in alternate formats upon request.*

Course Description

Students learn the principles of exercise programs needed by effective personal trainers and group fitness instructors. They learn how to facilitate rapport, adherence, self-efficacy, and behavior change in clients, as well as how to design aerobic and anaerobic exercise programs that help clients to improve posture, movement, flexibility, balance, core function, cardio respiratory fitness, and muscular endurance strength. The practical and educational components of teaching a safe and effective group fitness class are also covered. Prerequisite: MATH 095 and RDNG 116 if required by placement testing; ENGL 100; FITN 215; prior completion or concurrent enrollment in BIOL 201. 3 Cr. (3 Lec.) Fall semester.

Course Context/Audience

This course is designed for students who want to become certified personal fitness trainers and group fitness instructors. This course, in combination with other required courses, will give students the knowledge and understanding to prepare for a nationally recognized personal trainer certification exam.

Basic Skills/Entry Level Expectations

Writing: WC College level writing skills are required. See course co-requisites or pre-requisites.

Math: M4 If required, the student must have successfully completed MATH 095. Basic mathematical skills and basic algebra skills are required.

Reading: R4 If required, the student must have successfully completed RDNG 116. The course requires reading beginning college-level materials and higher college-level materials that will also be covered in class.

Course Goals

Upon successful completion of this course, students will be able to:

1. Understand the application of principles of exercise science, human anatomy, and bio-mechanics to movement design and exercise instruction
2. Understand principles and methods of training for cardio respiratory fitness, muscular strength and endurance, flexibility and body composition
3. Demonstrate the ability to individualize exercise instruction for classmates and healthy adults using an exercise progression model
4. Demonstrate the proper usage of various commercial fitness machines and equipment utilizing appropriate exercise guidelines/cues and spotting techniques.
5. Exhibit the communication skills needed in personal fitness instruction.
6. Explain, lead and apply the principles of aerobic and anaerobic dance-exercise routines
7. Demonstrate an understanding of legal concepts as they apply to personal training and aerobic leadership.
8. Identify organizations that offer fitness-related certifications and outline content on certification tests.

Course Objectives/Topics

Objective/Topic	# Hours
Human Anatomy	3-5 Hrs.
Exercise Physiology and Biomechanics	3-5 Hrs.
Fundamentals of Applied Kinesiology	3-5 Hrs.
Nutrition	3-5 Hrs.
Physiology of Training	3-5 Hrs.
Role and Scope of the Personal Trainer	3-5 Hrs.
Principles of Adherence and Motivation	3-5 Hrs.
Communication and Teaching Techniques	3-5 Hrs.
Basics of Behavior Change and Health psychology	3-5 Hrs.
Introduction to the Fitness Training Model	3-5 Hrs.
Building Rapport and the Initial Assessment	3-5 Hrs.
Functional Assessment: Posture, Movement, Core, Balance, and Flexibility	6-10 Hrs.
Physiological Assessments	3-5 Hrs.
Functional Programming for Stability, Mobility and Movement	3-5 Hrs.
Resistance Training: Programming and Progressions	5-7 Hrs.
Cardio Respiratory Training: Programming and Progressions	5-7 Hrs.
Aerobic Exercise: Programming and Progressions and Group Leadership	6-9 Hrs.
Mind-body Exercise	3-5 Hrs.
Adaptive Exercise	3-5 Hrs.
Common Musculoskeletal Injuries and Implications for Exercise	3-5 Hrs.
Emergency Procedures	3-5 Hrs.
Legal Guidelines, Code of Ethics and Professional Responsibilities	3-5 Hrs.
Personal Training Business Fundamentals	3-5 Hrs.
Other Topics	3-6 Hrs.

General Education Goals - Critical Thinking & Social/Global Awareness

CRITICAL THINKING OUTCOMES	HOW DOES THE COURSE ADDRESS THE OUTCOMES (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
<p>Students will be able to</p> <ul style="list-style-type: none"> ➤ develop meaningful questions to address problems or issues. ➤ gather, interpret, and evaluate relevant sources of information. ➤ reach informed conclusions and solutions. ➤ consider analytically the viewpoints of self and others. 	<p>Students will be required to assess, evaluate and respond to various forms of exercises to ensure quality and safety. If necessary, students will respond to an implement changes based on their assessment.</p> <p>Students will research peer reviewed journals to gather and interpret information regarding personal and group fitness.</p> <p>Students will be required to assess, evaluate and respond to various forms of exercises to ensure quality and safety. If necessary, students will respond to an implement changes based on their assessment. Through Case Studies, class projects, hands-on experiences and in lab. Through written reports, students must research peer reviewed journals.</p>

SOCIAL/GLOBAL AWARENESS OUTCOMES	HOW DOES THE COURSE ADDRESS THE OUTCOMES (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
<ul style="list-style-type: none"> ➤ Students will begin to understand how their lives are shaped by the complex world in which they live. ➤ Students will understand that their actions have social, economic and environmental consequences. 	<p>One of the underlying premise of this course is that person who is not physically healthy is negatively impacted in other aspects of their life. By being physically healthy, a person is able to obtain other goals in life and society with fewer barriers to overcome to reach said goals.</p> <p>People who routinely exercise tend to have higher self –efficacy thus leading to positive social changes. Students, partially through this course will understand the social impact of personal and group training.</p> <p>An entire unit of this course is focused on the business of exercise and fitness. Students will understand the impact they have as a personal or group trainer for a fitness center. This outcome will be assessed through a series of class discussions and case studies. This outcome will assess through quizzes, tests, and class discussions.</p>

Instructional Methods

Students will be learning this material through a combination of methods including:

1. Prepared classroom lectures
2. Assigned readings
3. Lab Experiences
4. Videos
5. Interactive Discussion
6. Assignments and projects

Methods of Assessment/Evaluation

Method	% Course Grade
Written Tests and Quizzes <ul style="list-style-type: none"> - Chapter Quizzes - Unit Tests 	30-50%
Lab Assessments <ul style="list-style-type: none"> - Exercise evaluations - Functional, Biomechanical and Physiological Assessments - Identification, measuring, testing, and calculations 	20-40%
Projects: <ul style="list-style-type: none"> - Designing fitness programs - Exercise and sport assessments 	10-40%
Written Reports and Case Studies <ul style="list-style-type: none"> - Peer review journal articles - Current Events 	10-30%
NOTE: The course instructor, with approval of the program chair, can make changes to evaluation methods.	

Texts

Suggested Textbooks:

1. American Council on Exercise (2010). Ace Personal Trainer manual, 4th ed. Bryant, C. & Green, D. (Eds.) San Diego, CA
2. American Council on Exercise (2010). ACE's Essentials of Exercise Science for Fitness Professional. Bryant, C. & Green, D. (Eds.) San Diego, CA

3. American Council on Exercise (2010). Master the Manual, 4th Ed. Bryant, C. & Green, D. (Eds.) San Diego, CA
4. American Council on Exercise (2007). ACE's Group Fitness Instructor Manual. Bryant, C., Green, D.(Eds.), & Ekeroth, C. San Diego, CA

OR

1. American College of Sports Medicine (2009) ACSM's Guidelines for Exercise Testing and Prescription, 8th edition **ISBN-13: 978-0-7817-6903-7**
2. American College of Sports Medicine (2009) ACSM's Resources for the Personal Trainer, 3rd edition **ISBN-13: 978-0-7817-9772-6**
3. American College of Sports Medicine (2009) ACSM's Certification Review, 3rd. edition ISBN-13: 978-0-7817-6901-3

OR

Other text books required/suggested by nationally recognized Personal Trainer Certification Agency

Bibliography

Frederic Delavier (2010). Strength Training Anatomy-3rd Edition. Human Kinetics, Champaign, IL ISBN-13: 9780736092265

Frederic Delavier (2003). Women's Strength Training Anatomy. Human Kinetics, Champaign, IL ISBN-13: 9780736048132

Kathleen Haywood, Nancy Getchell (2009) Life Span Motor Development-5th Edition. Human Kinetics, Champaign, IL ISBN-13: 9780736075527

Arnold Nelson, Jouko Kokkonen (2007). Stretching Anatomy. Human Kinetics, Champaign, IL ISBN-13: 9780736059725

American College of Sports Medicine (2003). ACSM Fitness Book-3rd Edition, Human Kinetics, Champaign, IL ISBN-13: 9780736044066

Riva Rahl (2010). Physical Activity and Health Guidelines eBook Recommendations for Various Ages, Fitness Levels, and Conditions from 57 Authoritative Sources. Human Kinetics, Champaign, IL ISBN-13: 9780736087544

David Sandler (2010). Fundamental Weight Training. Human Kinetics, Champaign, IL ISBN-13: 9780736082808

NSCA -National Strength & Conditioning Association, Lee Brown (2007). Strength Training eBook. Human Kinetics, Champaign, IL ISBN-13: 9780736084949

Wayne Westcott, Thomas R. Baechle (2007) Strength Training Past 50 2nd Edition eBook. Human Kinetics, Champaign, IL ISBN-13: 9780736082129

Jim Stoppani (2006) Encyclopedia of Muscle & Strength. Human Kinetics, Champaign, IL ISBN-13: 9780736057714

Suzanne Fitzsimmons and Linda L. Buettner (2006) Health Promotion for the Mind, Body, and Spirit. Venture Publishing, State College, PA. 978-1-892132-63-5

Laura Payne, Barbara Ainsworth, and Geoffrey Godbey (2010) Leisure, Health, and Wellness: Making the Connections. Venture Publishing, State College, PA 978-1-892132-89-5

Nancy Hamilton, Wendi Weimar, Kathryn Luttgens, (2008) Kinesiology: Scientific Basis of Human Motion, 11th Edition. McGraw Hill, New York, NY. ISBN-13 9780072972979

Susan J Hall, (2007). Basic Biomechanics, 5th Edition. McGraw Hill, New York, NY ISBN-13 9780073044811

William C Beam, Gene M Adams (2011). Exercise Physiology Laboratory Manual, 6th Edition. McGraw Hill, New York, NY N-13 9780073376592

Scott K Powers, Edward T Howley, (2009) Exercise Physiology: Theory and Application to Fitness and Performance, 7th Edition. McGraw Hill, New York, NY ISBN-13 9780073376479

David C. Nieman (2011) Exercise Testing & Prescription, 7th Edition. McGraw Hill, New York, NY. ISBN-13 9780073376486

V. Gregory Payne, Larry D. Isaacs, (2008) Human Motor Development: A Lifespan Approach, 7th Edition. McGraw Hill, New York, NY. ISBN-13 9780073523620

Thomas D. Fahey (2010). Basic Weight Training for Men and Women, 7th Edition. McGraw Hill, New York, NY. ISBN-13 9780073376585

Mark Vella (2008). Women's Guide to Strength and Anatomy Training, 1st Edition. McGraw Hill, New York, NY. ISBN-13 9780071495721

McArdle, W., Katch, F. and Katch, V. (2006) Essentials of Exercise Physiology. 3rd ed. Lippincott, Williams and Williams. Baltimore, MD.

Powers, S.K. and Howley, E.T. (1997) Exercise physiology: Theory and Application to fitness and performance, 3rd ed. Madison, WI: Wm. C. Brown Publisher and Benchmark.

Jack Wilmore, David Costill, W. Larry Kenney (2008) Physiology of Sport and Exercise w/Web Study Guide-4th Edition. Human Kinetics, Champaign, IL ISBN-13: 9780736055833

Journals and Publications:

JOPERD--The Journal of Physical Education, Recreation & Dance
Human Movement Science, Elsevier B.V.

Journal of Applied Biomechanics

Journal of Exercise Physiology

Physical and Health Education Journal

Strength and Conditioning Journal

Other Learning Resources

Audiovisual
Various videos pertaining to exercise
Electronic
No resources specified
Other
TC3 Fitness Center