



## Certified Personal Trainer Course Syllabus

**Course Textbook:** Howley, Edward T. and Thompson, Dixie L. 2017. *Fitness Professional's Handbook*. 7th Edition. Champaign, IL, Human Kinetics.

### Course Description:

This course is designed for current and future fitness professionals who are interested in helping individuals, communities, and groups gain the benefits of participating in regular physical activity in a positive and safe environment. This course includes guidelines for laboratory testing used in a health and fitness setting and for exercise programming both in healthy populations and in populations with special needs.

**Course Objectives:** At the conclusion of this course, students will be able to do the following:

- Conduct and analyze a health screening interview.
- List risk factors for cardiovascular disease.
- Explain the ACSM/AHA Physical Activity and Public Health Guidelines.
- Classify bones by shape, and explain ossification and bone mineral density.
- Explain how bones and muscles work together to form a biomechanical lever system.
- Define torque, and explain how it varies through the joint range of motion.
- Describe anaerobic and aerobic energy pathways, and explain which substrates are recruited for exercise of varying intensity and duration.
- Define VO<sub>2</sub> max, and explain how it is used to determine exercise intensity.
- List the six essential nutrients, and explain the role of each in energy production, performance and health.
- Explain how nutrition and exercise influence body weight, and provide guidelines for a healthy and effective weight loss program.
- Develop and implement exercise programs for cardio respiratory and musculoskeletal fitness.
- Name groups that are considered special populations, and explain the precautions and recommendations for safe and effective fitness programming for each.
- Describe the phases of behavior change, and explain how they apply to beginning a fitness program.
- Discuss strategies for minimizing injury during exercise.
- Discuss liability and legal issues pertaining to fitness professionals.

W.I.T.S. is an approved CEU provider for the American Occupational Therapy Association (AOTA), National Certification Board for Therapeutic Massage & Bodywork (NCBTMB), and the International Association of Continuing Education and Training (IACET). The American Council on Education has recommended 3 undergraduate academic credits for this course.

## ***"Things to Read"***

Readings and outlines are from the Fitness Professionals Handbook 7<sup>th</sup> Edition.  
(You are responsible for the material in these chapters, so stay ahead and commit time each day)

**Bold chapters represent they are used in both lecture and practical labs.**

Lecture/ Lab	Lecture Topics	Chapters	Lab Topics and Activities	Chapters
1	Health, Fitness, and Performance; Health Risk Appraisal	1, <b>2</b>	Introduction; Record Keeping; Health Screening and Risk Factors: ACSM Metabolic Equations	<b>2</b> , 6, 26
2	Functional Anatomy and Biomechanics	3	Assessing Cardiovascular Fitness	7
3	Exercise Physiology	4	Assessing Muscular Fitness, Flexibility and Low Back Function	9, 10
4	Nutrition and Energy Expenditure; Rx for Weight Management	5, 6, <b>12</b>	Assessing Body Composition and Anthropometric Measurements	8, <b>12</b>
5	Rx for Cardiovascular Fitness	<b>11</b>	Programming for Cardiovascular Fitness	<b>11</b>
6	Rx for Muscular Fitness Rx for Flexibility and Low Back Function	<b>13</b> , 14	Programming for Muscular Fitness: Machines	<b>13</b>
7	Special Populations	17, 18, 19, 20	Programming for Muscular Fitness: Free Weights	13
8	Behavioral Change; Injury Prevention and Treatment; Legal Issues	23, 26, 27	Alternative Training Techniques; Flexibility Training: Core Stability	10, 14

Upon receiving your textbook, it is recommended that you read the following chapters to help better prepare yourself for the first day of class:

1, 2, 6 and 26