



Course Title: **Body Basics for Aqua Fitness (AQX 3)**

Produced by: **Fitness Learning Systems**
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Course Type: **e-Learning Home Study**

Credit hours: IACET (International Association for Continuing Education and Training) 0.3 (3 Hours) Approved and Accepted by several additional organizations.

Author:

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Connie Jasinkas, M.Sc., brings over 30 years of experience, passion and humor to her work as an international health educator. In Cambridge, Canada, she provides aquatic rehabilitation and post-rehabilitation for patients with a wide variety of needs. She specializes in pain education, AquaStretch, and aquatic rehabilitation for musculoskeletal and systemic health issues. Her enthusiastic approach to active learning will help you put theory into practice.

Degrees:

Hons B.Sc. (H.K.), University of Guelph, 1976
M.Sc. (Exercise Physiology), University of Guelph, 1979
B.Ed. (Science, P.E.), Brock University, 1989

Certifications:

Faculty, ATRI (atri.org)
Certified Teacher (OTC)
Master Trainer, CALA (calainc.org)
Certified Exercise Physiologist, CSEP (csep.ca)
Certified Aqua Fitness Leader, AEA (aeawave.com)
Can Fit Pro (FIS)
Certified Laughter Yoga Leader (laughteryoga.org)
AquaStretch Approved Trainer (www.aquastretch.com)
CPR, First Aid, Canadian Red Cross

Course Summary:

Body Basics for Aqua Fitness is designed to give you fundamental knowledge about functional anatomy, kinesiology and physiology related to vertical aquatic training (aqua fitness). AQX Course 3 explains muscle roles and priorities, key training principles, as well as physiology of vertical immersion. Whether you are working with sports teams, post-rehabilitation groups, aquatic personal training, or seniors' group aqua fitness, Body Basics for Aqua Fitness is fundamental to your success.

Objectives:

After completing this course you will be able to:

1. Identify 17 fundamental movement terms and explain how they are used to describe basic movement.
2. Describe 4 planes of movement and explain exercises that are performed in each movement plane.
3. Describe 6 functions of bone, discuss the role of aqua fitness in bone health, and identify 22 bones in the human skeleton.
4. Describe two functions of muscles and identify 24 muscles in the human body.
5. Discuss 4 muscle pairs and explain exercises that will help to create muscle balance.
6. Explain the role of Overload in training and discuss how to use the FITT Formula to apply proper frequency, intensity, time, and type to training programs.
7. Explain the role of prime movers and stabilizers in exercise.
8. Discuss the role of 4 aquatic properties in programming for aquatic exercise: buoyancy, resistance/work, turbulence, and thermal conductivity.
9. Describe the effects of immersion on 4 body systems.

Outline:

Learning Outcome 1 Identify 17 fundamental movement terms and explain how they are used to describe basic movement.	
# Pages: 12	Videos: 9
Audio: with video	Interactive Material: Practice Activity
Subtopics: Bones.Muscles,Training Principles 1.1 Fundamental Movement Terminology 1.2 Anatomical Position <ul style="list-style-type: none">• <u>Flexion/Extension</u>• <u>Abduction/Adduction</u>• <u>Elevation/Depression</u>• <u>Inversion/Eversion</u>• <u>Dorsi flexion/Plantar flexion</u>• <u>Supination/Pronation</u>• <u>Protraction/Retraction</u>• <u>Rotation</u>• <u>Circumduction</u> 1.3 <u>Practice Activity</u>	
Assessment Questions: 3	
Learning Outcome 2 Describe 4 planes of movement and explain exercises that are performed in each movement plane.	
Pages: 6	Videos: 4
Audio: with video	Interactive Material: Practical Activity
Subtopics: Bones.Muscles,Training Principles	

<p>2.1 Movement Planes</p> <ul style="list-style-type: none"> • <u>Sagittal</u> • <u>Frontal</u> • <u>Transverse</u> • <u>Diagonal</u> <p>2.2 <u>Review Chart</u></p> <p>2.3 <u>Practical Activity</u></p>	
Assessment Questions: 2	
<p>Learning Outcome 3</p> <p>Describe 6 functions of bone, discuss the role of aqua fitness in bone health, and identify 22 bones in the human skeleton.</p>	
Pages: 6	Videos: none
Audio: none	Interactive Material: Bone Location practice activity
<p>Subtopics:</p> <p>Bones.Muscles,Training Principles</p> <p>3.1 Function of Bones</p> <p>3.2 Aqua Fitness and the Bones</p> <p>3.3 Bone Location Practice Activity</p>	
Assessment Questions: 3	
<p>Learning Outcome 4</p> <p>Describe two functions of muscles and identify 24 muscles in the human body.</p>	
Pages: 8	Videos: 2
Audio: with video	Interactive Material: 2 Interactive activities
<p>Subtopics:</p> <p>Bones.Muscles,Training Principles</p> <p>1.1 Function of Muscles</p> <p>1.2 Muscle Location Practice Activity</p>	
Assessment Questions: 5	
<p>Learning Outcome 5</p> <p>Discuss 4 muscle pairs and explain exercises that will help to create muscle balance.</p>	
Pages: 7	Videos: 0
Audio: 0	Interactive Material: 2 activities
<p>Subtopics:</p> <p>Bones.Muscles,Training Principles</p> <p>5.1 Balancing Muscle Usage</p> <p>5.2 Muscle Pairs</p>	
Assessment Questions: 3	

Learning Outcome 6 Explain the role of Overload in training and discuss how to use the FITT Formula to apply proper frequency, intensity, time, and type to training programs.	
Pages: 10	Videos: 0
Audio: 0	Interactive Material: 2 Activities
Subtopics: Bones.Muscles,Training Principles 6.1 Training Principles <ul style="list-style-type: none"> • Overload • FITT Formula • FITT Formula Practice Activity <ul style="list-style-type: none"> ○ Sport ○ ADLs 	
Assessment Questions: 3	
Learning Outcome 7 Explain the role of prime movers and stabilizers in exercise.	
Pages: 11	Videos: 6
Audio: 1 and with video	Interactive Material: 1 Activities
Subtopics: Bones.Muscles,Training Principles 7.1 Muscle Roles <ul style="list-style-type: none"> • Muscle Roles Practice Activity • Sample Program 	
Assessment Questions: 3	6 pages are sample programs
Learning Outcome 8 Discuss the role of 4 aquatic properties in programming for aquatic exercise: buoyancy, resistance/work, turbulence, and thermal conductivity.	
Pages: 14	Videos: 4
Audio: with videos	Interactive Material: 1 activity
Subtopics: Body Systems 8.1 Aquatic Properties <ul style="list-style-type: none"> • Aquatic resistance (Drag) • Hydrostatic Pressure • Buoyancy <ul style="list-style-type: none"> ○ Chest Deep Buoyancy Options ○ Deep Water Buoyancy Options • Turbulence 	
Assessment Questions: 7	

Learning Outcome 9 Describe the effects of immersion on 4 body systems.	
Pages: 14	Videos: 1
Audio: with video	Interactive Material: print out
Subtopics: Body Systems 9.2 Effects of Immersion <ul style="list-style-type: none"> • Heart • Kidneys • Lungs • Nervous System 9.3 Fit Tips for Participants	
Assessment Questions: 2	

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