



WaterCoach

**Professional Level I
Study Guide
Version 5.0**



About the Study Guide

The WaterCoach Professional Level I study guide serves as a resource to the online Level I course. This study guide has been designed to help you better understand the content of the main text and highlights the important points and concepts.

This guide encourages you to write the answers directly in the guide. This way of studying helps provide an easy way to follow the sequential pattern of the course text.

This course and study guide is divided into four modules:

Module I: About Rowing

Module II: About Training

Module III: About Physiology

Module IV: About Technique

We recommend that you use the study guide to prepare for the final tests at each module.



Module I: About Rowing

Why is rowing ideal for any user, regardless of age, sex or physical condition?

When rowing how do you increase the intensity?

What happens to the drag when the boat increases in speed?

What limits the speed of the boat?

How does the WaterRower differ from other conventional rowing machines?

How are the three major muscles group recruited when rowing?

Why is rowing such an efficient exercise?

Which are the dynamic muscles groups and which are the static muscle groups of the rowing stroke?

How did the invention of the sliding seat change rowing?



What does the volume of water in the tank represent?

How is the majority of the training done in rowing?

What is the distance of Olympic class racing?



Module II: About Training

A structured training program should allow for:

- 1)
- 2)
- 3)

Knowing the users objectives will help determine:

- 1)
- 2)
- 3)
- 4)

Name the 3 types of goals:

- 1)
- 2)
- 3)

Goals need to be:

- 1)
- 2)
- 3)

What type of training is good for muscle development?

How can one best increase their general fitness?

How does exercise reduce stress?



Outline a basic warm up on the WaterRower?

Name the four different types of sessions that can be done on the WaterRower and outline an example of one?

Exercise intensity depends on the individuals:

What is the Karvonen Formula?

Calculate the 65% intensity training heart rate for a 35 year old male who has a resting heart rate of 72 beats per minute.

What is the best intensity range of ones maximum heart rate for weight loss?

How and why is it important to monitor ones progress?



Module III: About Physiology

What is aerobic based exercise?

A sustained exercise program of aerobic conditioning will improve the efficiency of:

What are the intensities of anaerobic training?

What are the dangers of prolonged exercise at high intensities?

A rowers training program consists of a combination of which exercises?

- 1)
- 2)
- 3)

During the rowing action which muscle group accounts for the most power?

How does rowing provide an even aerobic load over all the major muscle groups?

What are the muscle characteristics of rowers that allow for meeting high aerobic demands of rowing?



Name 4 main muscle groups used during the rowing action:

- 1)
- 2)
- 3)
- 4)

Why do rowers have such high oxygen consumption values?

When rowing respiratory muscles are used for 2 purposes:

- 1)
- 2)

Heart rate measurements vary according to the individuals:

Which types of training programs are good for aerobic conditioning?



Module IV: About Technique

Rowing comprises of both fast and slow movements, during which phases do each of these movements occur?

- 1) Fast Movement occurs during the
- 2) Slow Movement occurs during the

Name the 5 key elements of the rowing action:

- 1)
- 2)
- 3)
- 4)
- 5)

The combination of the muscle groups of the rowing action needs to be:

How can a rower achieve full range of motion?

During the Rock Over phase how can one maintain the correct posture?

How do back injuries occur when rowing?

Where are the largest and strongest muscle groups in the body?

Name and describe one main problem of the upper body movement during the rowing action?



The rowing action consists of 3 positions and 3 phases name each:

Position	Phase
I)	I)
II)	II)
III)	III)

Describe the Rocked Over Position:

What are technique Check Points and how do they differ from Focus Points?

What important technique points need to be checked at Check Point 3:

Name 5 important focus points during the drive phase?

- 1)
- 2)
- 3)
- 4)
- 5)

Give an example of how the slide work drill can be used when warming up?

Practicing the slow slide drill improves?



Name 3 technique calls that an instructor can use during the recovery phase?

- 1)
- 2)
- 3)

What tips can be used to correct bent wrists?

What is 'bum shoving'?

What are the tell tale signs of knees rising too early?

Outline the tips for correcting a 'hunched catch'?

What are the benefits of rowing in a crew?



Relevant Reading Material

Books:

Rowing: Training, Fitness, Leisure by [Wolfgang Fritsch](#)
Publishers Meyer & Meyer Fachverlag und Buchhandel GmbH; (May 2000)

High Performance Rowing by John McArthur
Publishers Crowood Pr; (October 1997)

The Shell Game: Reflections on Rowing and the Pursuit of Excellence by Stephen Kiesling
Publishers McGraw-Hill/Contemporary Books; (April 1983)

The Book Of Rowing by [D. C. Churbuck](#), [David C. Churbuck](#),
Publishers Overlook Press; (March 25, 2003)

Skillful Rowing by [Edward McNeely](#), [Marlene Royle](#), [Ed McNeely](#),
Publishers Meyer & Meyer Fachverlag und Buchhandel GmbH; (June 2002)

Steven Redgrave's Complete Book of Rowing by [Steven Redgrave](#),
Publishers Partridge Press; London (May 2000)

Websites:

www.pponline.co.uk , Peak Performance Online
www.worldrowing.com , Official FISA Website
www.rowing-training.co.uk
www.roversworld.com
www.brianmac.demon.co.uk/rowing
<http://www.row2k.com>

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