Course Title: **Determining Intensity with Aquatic Target Heart Rates**

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

Credit hours: AEA 2.0, ACSM 2.0, ATRI 0.2, NFPT 1.0, NCSF 1.0, YMCA 2.0, NSPA 2.0

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June M. Chewning has taught a variety of fitness classes since 1978, and has been presenting educational health/ wellness lectures and fitness classes to corporations, the community, and fitness professionals since 1985 both in the U. S. and Internationally. June serves on the Aquatic Exercise Association Research Committee, is recipient of the AEA 1995 Achievement Award, and 2001 Contribution to the Aquatic Fitness Industry Award. She serves as adjunct faculty for Cincinnati State College, developing and teaching several courses for the Health Fitness Technician degree program. She is President of Fitness Learning Systems, a CEC education company. She specializes in educational formatting and programming.

## Course Summary:

This course provides evidence based methodology and practice for aquatic heart rate deductions. Generally accepted equations and methods are provided with explanations and practice equations. After completing this course you will be able to determine and apply aquatic target heart rates for safe and effective exercise intensity.

## Objectives:

After completing this course you will:

1. Know definitions for heart rate terms.
2. Learn how to calculate a maximum heart rate using the Standard HR Equation and the Gellish Equation.

3. Learn how to calculate a target heart rate intensity using the Percentage of Maximum Heart Rate formula and the Karvonen formula.
4. Understand the use of Rate of Perceived Exertion in measuring exercise intensity.
5. Know the theory and causes for aquatic heart rate responses.
6. Learn the evolution of aquatic heart rate deductions.
7. Learn the Kruel Protocol for Individualized Heart Rate Deductions.
8. Learn, understand, and practice 2 methods for determining aquatic target heart rates.
9. Understand how to measure and interpret aquatic heart rates.
10. Practice equations for maximum heart rate and target heart rate for both land and water

## Outline:

Monitoring Exercise Intensity
Definitions for Heart Rate Terms
    Optional link: Heart Rate 101

Heart Rate Methods
    Heart Rate Reserve Method (HRR)
        Methods for Determining Maximum Heart Rate
        Practicing HRmax Equations
            Optional Link: Math Primer Review
        Practicing the Heart Rate Reserve (Karvonen) Formula
    Percentage of Maximal Heart Rate (HRmax) Method
        Practicing the Percentage of Maximal Heart Rate (HRmax) Method
    Rate of Perceived Exertion (RPE)

Aquatic Heart Rate Reponses
Aquatic Heart Rate Evolution
New Evidence for Aquatic Heart Rates
Aquatic Target Heart Rates
  Determine the Numbers
    Part 1
        Optional Link: Maximum Heart Rate Equation Review
    Part 2
    Part 3
        Option 1
        Option 2
        Definitions for Aquatic Heart Rates
        HR Palpitation Protocol
        Kruel Individualized Aquatic Heart Rate Formula
        Sample Equations
            Kruel Aquatic HR Deduction: Percentage of Maximum HR Formula
            Kruel Aquatic HR Deduction: Karvonen Formula
            Gellish Formula for Maximum HR
  Measure and Interpret
Summary Outline
Sample Calculations

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