

A vertical strip on the left side of the slide contains several small, semi-transparent images of athletes in various poses and settings, including a runner and a person in a lab coat.

- Humans are complex systems. When coaching we tend to look at the pieces but optimal development of an athlete can only occur when we realize that every system in the body affects every other system. This session will encourage you to look outside the box, treating the athlete as a integrated system of physiological, mechanical, social, and psychological components.

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Systems Approach

- Exercise and coaching science has traditionally been taught using discrete systems and blocks of learning
 - Physiology
 - Biomechanics
 - Motor learning
 - Technique
 - Nutrition
 - Psychology
 - Ethics
 - etc

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Systems Approach

- Integration of the systems is often ignored and in some cases discouraged
- Coaches develop areas of expertise based on available information sources, personal preferences and personal experience

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Integrated coaching

- Exercise Science vs Sport Science
 - Exercise science uses exercise as a medium for studying specific physiological, psychological, biomechanical, social, or nutritional responses
 - Sport Science studies winning and how to win

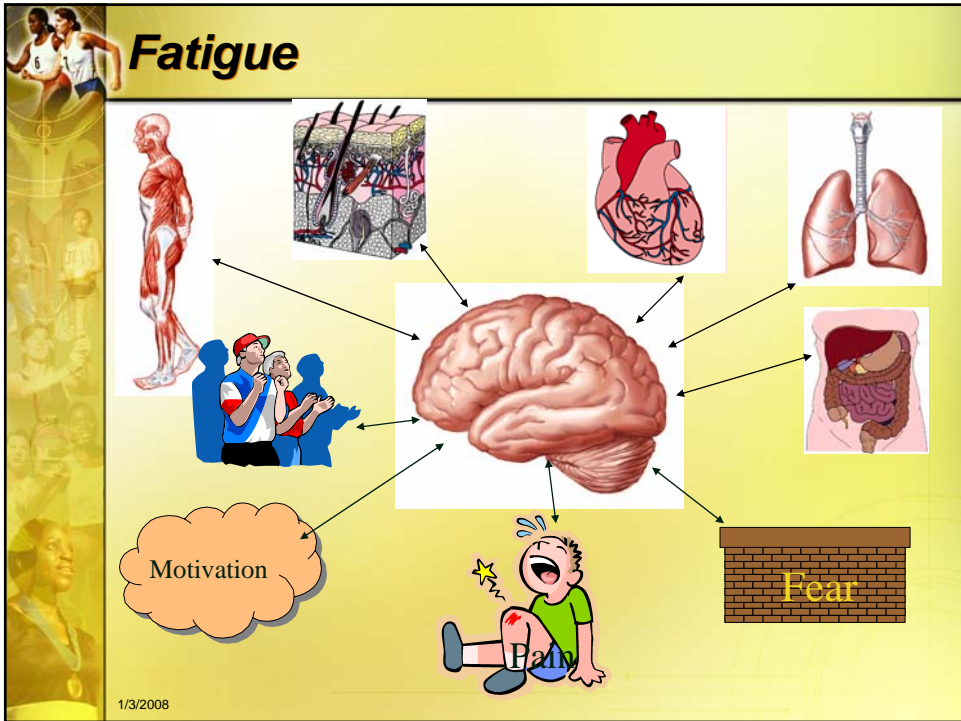
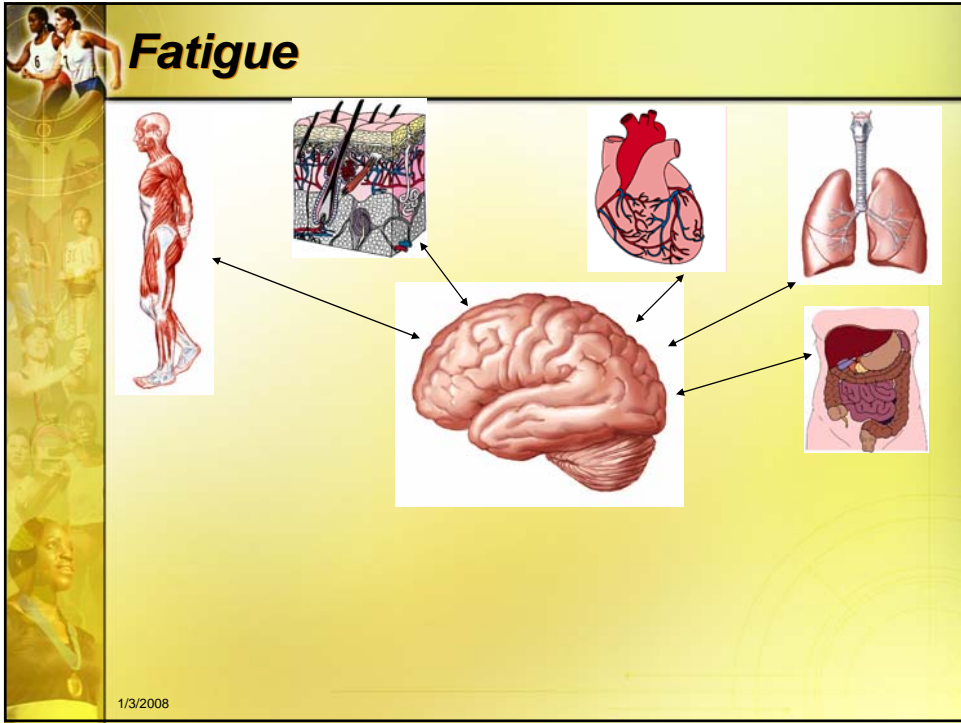
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An example of integration

- Fatigue
 - Many reasons and models for fatigue have been proposed
 - Metabolic waste
 - Energy store depletion
 - Mechanical trauma
 - Heat
 - Recently Central governor theory has been proposed and received a lot of attention

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An example of integration -

- 2K erg tests
 - Elite international rowers can hold 47-50% of Peak power for 2K
 - Most other athletes under perform
 - Why?

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An example of Integration

- Winter Erging
 - Not uncommon for an athlete to have difficulty holding a split that should be easy for them based on physiological testing.
 - Why?

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An example of integration

- Persistent technical errors
 - Some errors continue to occur regardless of how many drills you do with an athlete
 - Why?

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An example of integration

- Come to my strength and rowing technique session to find out?



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Becoming and Integrative coach

- Adopt the “No Philosophy” philosophy
 - Creating a coaching philosophy locks you into one way of thinking
 - Everything works but nothing works forever
- Change is constant
 - Be willing to change how you do things to suit the situation
 - Nothing works all the time
- Not about you
 - Put aside ego
 - Not your athletes
 - Athletes success is your success

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Becoming and integrative coach

- Learn to grow-grow to learn
 - Become a student of the sport
 - Realize that you don't know what you don't know
- Become self aware
 - Learn you strengths and weaknesses as a coach
 - Understand your biases

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Becoming an integrative coach

- Learn from outside rowing
 - Workplace psychology and people management
 - Other sports
- Integrate others
 - Coaches
 - External experts
 - Coach controls the team
 - Experts have to learn to act as a team
- Be creative
- Be patient – this takes time

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Thank You

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