THEORY AND METHODOLOGY OF TRAINING
HH KINE 3570 3.0 / S1 2013

Objectives:
1. To acquaint the students with the principles and theoretical basis of training.
2. To understand the basic concepts of planning and implementing strength and conditioning programs.
3. To become aware of the service publications, and certification offered by the National Strength and Conditioning Association and the Coaching Association of Canada.
4. To become familiar with books, periodicals, videos, DVS’s and research related to scientific training methods.


Note re: Textbook
Essentials of Strength Training and Conditioning, is the primary resource for individuals preparing for the National Strength and conditioning Association (NSCA) Certification for the Strength and Conditioning Specialist (CSCS).

Note: It is possible to write the challenge exam for NSCA Certification upon completion of KINE 3570 3.0.

Also NSCA publishes:
1. Strength and Conditioning Professional Journal
2. Research Journal of NSCA

For further information:

NSCA
1885 Bob Johnson Drive
Colorado Springs, CO 80906
Website: www.nsca-lift.org
E-mail: nsca@nsca-lift.org
Tel: 1-800-815-6826

Coaching Association of Canada
1600 James Naismith Drive
Gloucester, Ontario K1B 5N4
Website: www.ca-coaching.org
E-mail: info@ca-coaching.org
Tel: 1-877-216-7243
Course Evaluation:

Note: Tests are based on readings and lecture material.

**Assignment:**
Annual Planning Instrument  
Or  
Conditioning Training Observation and Analysis 15%  
Due: Monday, June 3

**Test #1**  
40%  
Monday, May 27

**Test #2**  
45%  
Last day of class: Wednesday, June 12

**Total**  
100%

Note: Papers can be viewed but are not returned. Keep 2nd copy.

Late papers: 1 mark per day late deducted excluding Saturday and Sunday.

Course Content Order

1. **Principles of Training**  
Physiological Effects of Training  
Textbook Chapter 5 / Page 96, Chapter 6 / Page 128  
Coaching: The Art and Science, Page 129, 130  
Video – *Never Look Back* – Florida State University  
Video – *Functional Training Progressions*

2. **Periodization**  
Analyzing the Demands of the Sport  
Coaching: The Art and Science: Part 3  
Chapter 6: Periodization: Theory and Methodology of Training  
Chapter 19 - Text

3. **Talent Identification – Chambers**  
Test Selection and Administration  
Textbook Chapter 11, 12  
Part 2: Coaching: The Art and Science

4. **Resistance Training – Strength Power**  
Theory: Textbook Chapter 1, 3 (part of), 5  
Strength/Power: Textbook Chapter 14, 15  
Strength for Sports: DVD  
Advanced Strength Training: DVD  
Power for Sport Performance: DVD  
Explosive Lifting for Sport: DVD  
Core Strength and Stabilization for Athletes: DVD

5. **Plyometric Training**  
Textbook Chapter 16  
High Powered Plyometrics: DVD

6. **Speed, Agility and Speed Endurance**  
Textbook Chapter 17  
Speed for Sport Performance: DVD  
Developed Lateral Speed and Change of Direction: DVD  
Training for Speed, Agility and Quickness: DVD  
Drills and Exercises to Improve Static and Dynamic Balance: DVD
7. **Age and Sex Related Differences**  
   Textbook Chapter 7

8. **Energy Systems Training**  
   Theory: Chapters 2, 5 (part of), 6, 18  
   Prescriptions for Alactic, Lactic and Aerobic Training (Hand out)  
   Part 3. Coaching: The Art and Science

9. **Warm-up and Stretching**  
   Textbook Chapter 13  
   Flexibility for Sport and Fitness: DVD  
   Core Assessment and Training: DVD

10. **Fatigue, Overreaching, Overtraining, Detraining Rest and Recovery Strategies**  
    Textbook Chapter 5 (part of)  
    Rest and Recovery, Chapter 5, Theory and Methodology of Training.  
    Part 3. Coaching: The Art and Science

11. **Nutrition**  
    Textbook Chapter 10  
    Winning Sports Nutrition – University of Arizona: Video

12. **Performance Enhancing Substances**  
    Textbook Chapter 9

13. **Travel, Jetlag, Pollutants, Heat, Cold**  
    Part 3. Coaching: The Art and Science

14. **Psychology of Athletic Preparation and Performance**  
    Textbook Chapter 8 (if time permits)  

**Guest Speaker**  
Professional Athletic Trainer

**Readings:**  
Textbook  
Chapter 1, 2  
Chapter 3: Testosterone, Growth Hormone, Insulin Growth Factors (IGF), Cortisol  
Chapter 5, 6, 7  
Chapter 9 Steroids, HGH, EPO, Creatine, Caffeine, Insulin Like Growth Hormone (IGF-1)  
Chapter 10  
Chapter 11, 12 (Review – not covered in lectures)  
Chapter 13-19  
Chapter 8 (If time permits)  
Reference Books  
Chapter 5 Theory and Methodology of Training, Bompa and Haff (Covered in lectures)  
Part 2, 3, 4 Coaching: The Art and Science, Chambers (Covered in lectures)