

SCHOOL OF KINESIOLOGY AND HEALTH SCIENCE**COACHING: METHODOLOGY AND SCIENCE
HH KINE 4600 3.0 / S1 2009**

Course Director: Professor Dave Chambers
E-mail: dchamber@yorku.ca
Time & Location: Monday/Wednesday
9:30 am – 12:30 pm
Stong College, 218

Course Description:**1. BRIEF COURSE DESCRIPTION:**

The course will focus upon coaching methodology, and the application of scientific principles to coaching, systems of training, scientific training methods, and various influences on training and performance will be examined as they pertain to coaching.

2. EXPAND COURSE DESCRIPTION:*Unit 1 Coaching Methodology*

- Nature of Coaching
- Respect Factors
- Communication
- Team Cohesion
- Time Management
- Stress management
- Building an Effective Program
- Talent Identification
- Learning Process
- Designing Effective Training Sessions

Unit II Periodization

- Planning the year
- Seasonal plan – phases
- Annual plan – fundamental, steps

Unit III Physiological Effects of Training

- Effects of training on the various systems/detraining

*Unit IV Training the Energy Systems**Unit V Training for Strength, Power, Muscular Endurance*

- Physiology
- Training adaptations
- Principles
- Types of Strength Training
- Women and resistance training
- Children and resistance training

Unit VI Training for Speed, Agility, Quickness

Unit VII Flexibility Training

- Physiology
- Types
- Methods

Unit VIII Recovery and Regeneration

- Physiology
- Over training
- Managing recovery process

Unit IX Nutrition and Sports Performance

- Diet and performance
- Pre, during and post event nutrition
- Ergogenic acids

Unit X Environmental Influences

- Heat
- Cold
- Pollution
- Altitude

COURSE REQUIRMENTS

1)	Test #1: <i>Wednesday June 24</i>	30%
2)	Sport Specific Training Plan	30%
3)	Test #2: <i>Exam Period</i>	<u>40%</u>
	Total	100%

Note: Tests are based on readings and lecture material.

- 1) Test #1 (Value 30%) *Wednesday, June 24*
 - Coaching Level 3 Manual Chapter1
 - Coaching: The Art and Science Part 1, 2, 3 (Periodization)
 - All lecture material Units I, II & III
- 2) Test #2 (Value 40%) *Exam Period*
 - Coaching Level 3 Manual Chapter 6
 - Coaching: The Art and Science Part 3
 - All lecture materials Units IV-X inclusive

- 4) Sport Specific Training Plan (Value 30%)
- Yearly Planning Instrument+ Setting Priorities sheet
 - General and specific preparation period
 - Week by week program
 - Strength/power, energy systems, flexibility
 - Can also include specific speed and agility drills
 - For elite athletes
 - Include suggested reps/sets, etc.
 - Include diagrams and instructions with exercises
 - Include muscle groups used with each exercise
 - Use at least 3 references of specific programs for your selected sport
 - Include a maintenance program used during the competitive season (1 or 2 pages only)
 - Approximately 20 pages – suitable for a handout for elite athletes in your selected sport

Note: Due: Monday, July 6. Late papers deduct 1 mark per day (Saturday and Sunday excluded).

If you wish your paper returned submit two copies. Papers will be available for viewing if not returned.

TEXTS REQUIRED

Chambers, D., Coaching: The art and science. Toronto: Key Porter Publishers, 1997.

Level 3 Theory: Manual and Coaching Assessment Workbook, National Coaching Certification Program. Ottawa, Coaching Association of Canada.

Week #1 & 2 Coaching Methodology

Week #3 Periodization: Physiological Effects of Training

Week #4 Strength, Power, Speed, Agility

Week #5 Energy Systems, Recovery, Regeneration, Fatigue, Overtraining

Week #6 Nutrition, Ergonic Aids, Environmental Influences