

UNIVERSITY OF OTTAWA
FACULTY OF HEALTH SCIENCES
SCHOOL OF HUMAN KINETICS

Session	: Fall 2009
Course code	: APA 3335
Course title	: Fitness training principles
Number of credits	: 3
Course timetable	: Lectures: classroom: SITE – H0104 Friday: 8:30-11:30 Laboratories: Montpetit gyms
Language of instruction	: English
Professor	: Sébastien Boyas Office: MNT-345 Tel: 613-562-5800 ext. 4255 E-mail: sboyas@uottawa.ca
Office hours	: Friday: 11:30-13:30

1. Course description and objectives

Concepts of active living and physical fitness; active living and the crucial role it plays in health and wellness. Practical component (laboratories) includes various strategies to achieve active living; aerobic fitness training methods, muscle toning, stress management.

This course aims to familiarize students with the training process. It deals with training basic principles and with variables that can be manipulated by the coach to adapt the training stimulus to the athlete's abilities and objectives. This course also presents methods and tests to evaluate the fitness and physical abilities of individuals, some of them will be performed during labs. Finally, this course deals with the training session and the different methods to develop physical abilities of athletes and pathologic individuals.

2. Course evaluation and important dates

Attend lectures and laboratories is mandatory. Attendance to all lectures is necessary to gather the knowledge essential to the understanding and mastery of this course. Notions and exercises explained in laboratories will be questioned during exams. Students have to come to labs with appropriate equipment (shorts/athletic pants, t-shirt and appropriate shoes). Course information and notes are available on APA 3335 WebCT. It is the student's responsibility to access the web site to obtain all relevant information for course content, activities and evaluations. Some information will only be provided during class lectures and labs, thus all information and course material is not provided on the web site or in the course package. It is the student's responsibility to attend class or to obtain the information that was provided in class from his or her peers.

- 1st intermediate exam (25% final mark) : 4th week
- Lab 1 : 5th week
- 2nd intermediate exam (25% final mark) : 8th week
- Lab 2 : 9th week
- Lab 3 : 12th week
- Final exam (50% final mark) : exam period

3. Books supporting the course (it is not essential to buy them)

- Baechle T.R., Earle R.W. **Essentials of strength training and conditioning**. 2008, Human Kinetics.
- Bompa T.O., Haff G.G. **Periodization**. 2009. Human Kinetics.

4. Course program

1. Training bases
 - History
 - Definitions, objectives
 - Adaptation
 - Surcompensation
 - Overtraining
 - Basic principles
 - Multilateral development vs. Specialisation
2. Preparation for training
 - Physical
 - Technical
 - Tactical
 - Theoretical
3. Variables of training
 - Volume
 - Intensity
 - Relation volume / intensity
 - Density
 - Complexity
4. Fitness evaluation
 - Why, when, how and who test?
 - Tests selection
 - Evaluation of tests quality
 - Tests administration
 - Which tests for which physical ability?
5. Rest and recovery
 - Fatigue
 - Muscular damages
 - Recovery theory
 - Recovery methods
6. Training session
 - Warm-up
 - Heart of the session
 - Back to calm
 - Stretching
7. Training methods
 - Physical abilities
 - Force and power training
 - Plyometric training
 - Speed and agility training
 - Aerobic training
 - Flexibility training
 - New training methods
8. Periodization of training
 - Annual training plan
 - Training cycles
 - Peaking for competition