



## Course Synopsis

Students will first gain a base knowledge in the theory of physical fitness and all its integral components. Students will then apply this cognitive knowledge to the physical implementation of training programs. Students will be required to **set goals**, and **document all exercise through journal taking**. Self reflection will be a key component of the course as students will have to evaluate and assess different training and nutritional principals as they apply them to their fitness regimen.

## Instructor Info

Mr. Karl Wodtke  
B.Sc Biology, M.Sc Nutritional Neuroscience in progress, B. Ed,  
Sports Nutrition Consultant  
Email : [karl\\_wodtke@sd34.bc.ca](mailto:karl_wodtke@sd34.bc.ca)  
Phone: 604-864-0011  
Class Website: <http://sd34.homeip.net/rhss/strength11>



## Rationale

Peak fitness is a goal that is seen only in highly motivated and driven individuals. These individual want to push themselves to their physical limits and beyond. In order to push themselves beyond their limits, a sound knowledge in training and nutritional principals is needed. Strength and Conditioning 11 takes fitness to the next level, giving students a cognitive and physical base for perk fitness and at the same time providing solid knowledge on how to support a training program with proper nutrition strategies.

## Unit Topic/Module Descriptions

### **Unit 1: Anatomy and Exercise Physiology**

Curriculum Organizers-Components of Fitness

It is expected students will:

- describe the basic structure of the human anatomy and physiology
- describe the knowledge of, and the ability to apply, basic muscle development principles and their modifications involved in weight training

Curriculum Organizers-Fitness Pretest

It is expected students will:

- participate in various pre-fitness tests to determine entry level fitness
- appreciate the need for improvement in certain areas of fitness and set goals to meet those needs

### **Unit 2: High Performance Nutrition**

Curriculum Organizers- Nutrition

It is expected students will :

- understand the importance of diet in a successful training program
- analyze their current diet to determine weak spots
- devise a menu for themselves which is nutritionally balanced
- demonstrate the ability to modify their diet to enhance the training effect
- be able to analyze and distinguish between the different components of a health diet

#### Curriculum Organizers-Performance Enhancing Aids

It is expected that students will:

- analyze and describe different supplements and ergogenic aids as they apply to training
- demonstrate the knowledge of side effects of many performance enhancing drugs

**\*NOTE: we will be discussing in detail how many popular supplements work in the body, their pros and cons, and efficacy. We will also learn how steroids work and how they impact the body.**

#### Unit 3: Components of Fitness

##### Curriculum Organizers- Different forms of training

It is expected students will:

- understand the components of fitness
- recognize or define terms related to cardiovascular fitness, strength acquisition and flexibility
- identify primary and secondary muscles used in specific exercises

##### Curriculum Organizers- Community Recreation Exposure

It is expected that students will:

- develop knowledge of the different fitness facilities that are available to them now and after they graduate from high school
- experience guest presentations from fitness club staff

#### Unit 4: Strength and Conditional Training

##### Curriculum Organizers-Weightlifting

It is expected that students will:

- apply their cognitive knowledge to physical practices
- demonstrate a positive attitude towards physical fitness
- demonstrate the terminology used in weight training
- demonstrate proper lifting techniques
- have an increased level of strength
- document and evaluate all exercises performed
- demonstrate stretching techniques as they apply to performance training
- engage in safe and respectful weight-room behavior including spotting and positive encouragement

##### Curriculum Organizers- Aerobic Exercise

It is expected students will:

- participate in various aerobic exercise activities such as a circuit training and jogging
- keep in track of and stay within their target heart rate

#### Instructional Component

The students will gain a sound cognitive framework before ANY practical component of exercise training begins. Instruction will be through active learning, direct instruction including multimedia, group activities, self reflection, journaling, and peer instruction. The teacher will act as a mentor in sharing his experience in weight training to help students reach their respective athletic goals.

**Assessment Component**

Student letter grades will be based on their ability to demonstrate completion of learning outcomes.

**50% Affective evaluation:** both personal and teacher-based. Students will receive daily participation marks

**20% Cognitive evaluation of Learned Theory:** Written tests and quizzes.

**20% Reflective Journals**

**10% Fitness Testing:** determined by pre and post fitness tests for each module

---

Parent/Guardian Signature

---

Student Signature