

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY  
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: RECREATION AND PHYSICAL TRAINING

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Code No.: REC 100 Semester : ONE

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Program: AVIATION

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Instructor: ANNA MORRISON, B.P.E.

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Date: SEPTEMBER 1992 Previous Outline: January 19 92

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**% COURSE DESCRIPTION**

The intent of this course is to enhance the students' knowledge and skills in the areas of fitness and health. As understanding of the many benefits and components of fitness is gained, it is intended that students will choose to adopt a healthy life-style.

**STUDENT PERFORMANCE OBJECTIVES**

Upon successful completion of this course students will be able to:

- a. identify the benefits of fitness and why health is a matter of choice.
- b. identify the five components of fitness and apply the FITT formula for each of them.
- c. identify the many benefits of fitness, both physical and psychological.
- d. demonstrate an understanding of basic anatomy and weight training principles by developing their own program to improve muscular strength and/or muscular endurance.
- e. demonstrate an understanding of safe exercise practices and special precautions related to vulnerable anatomical structures.  
  
    apply sound nutritional principles to enhance fitness and overall health.
- g. demonstrate an understanding of safe weight (fat) management techniques.

**TOPICS TO BE COVERED**

- 1. Introduction to Fitness and Health
- 2. Muscular Strength and Muscular Endurance
- 3. Cardiovascular Endurance
- 4. Flexibility
- 5. Nutrition
- 6. Weight (Body Composition) Management

**LEARNING ACTIVITIES**

**RESOURCES**

**1.0 Introduction to Fitness and Health**

Upon successful completion of this unit students should be able to:

- 1.1 Explain why health is a matter of choice.
- 1.2 Describe how death and disease patterns are changing

Overhead  
Fantastic  
Lifestyle  
Questionnaire  
Overhead

**LEARNING ACTIVITIES**

- 1.3 Define health-related and performance-related fitness
- 1.4 Describe the components of health-related fitness.
- 1.5 Apply the FITT formula to each of the five components of health-related fitness.
- 1.6 Identify the risk factors of cardiovascular disease and the role of exercise in reducing the risk of cardiovascular disease
- 1.7 Identify the role of exercise in preventing and/or managing other chronic diseases.
- 1.8 Identify benefits of fitness
- 1.9 Identify reasons for "dropping out"
- 1.10 Describe motivational strategies to help you stick with an exercise program.
- 1.11 Describe tests for each component of health related fitness.

**RESOURCES**

- Overhead Handout
- Overhead Handout
- Overhead Handouts
- Overhead Handout
- Overhead Handout
- Overhead Handout
- Overhead
- Overhead

**2.0 Muscular Strength and Muscular Endurance**

Upon successful completion of this unit the student should be able to:

- 2.1 Describe the specific benefits of weight training
- 2.2 Describe and demonstrate the concentric and eccentric phase of muscular contraction
- 2.3 Define agonist and antagonist as they relate to muscle groups
- 2.4 Discuss the strength development of men compared to women
- 2.5 Discuss anabolic steroid use and the potential side-effects
- 2.6 Discuss the importance of warming-up and cooling-down when weight training
- 2.7 Describe and demonstrate a proper warm-up and cool-down
- 2.8 Demonstrate an understanding of various weight training myths and fallacies
- 2.9 Demonstrate understanding of safe weight training practices
- 2.10 Identify and locate the major muscle groups of the body
- 11 Demonstrate the actions, weight training exercises, and stretches for each major muscle group
- 12 Explain the principles of training including Specificity, Progressive Overload, Rest, Adaptation, etc.

- Weight Training Manual
- Overheads
- Weight Training Manual
- Demonstration Handouts
- Demonstration Handouts
- Overheads
- Weight Training Manual

**LEARNING ACTIVITIES**

**RESOURCES**

**3.0 Cardiovascular Endurance**

Upon successful completion of this unit the student should be able to:

- 3.1 Explain the differences between aerobic and anaerobic activities
- 3.2 Demonstrate methods for determining one's Target Heart Rate zone for exercise
- 3.3 Discuss the importance of warming-up and cooling-down when participating in cardiovascular endurance training

Video  
Overheads  
Handouts  
Handout

**4.0 Flexibility**

Upon successful completion of this unit the student should be able to:

- 4.1 Describe factors limiting flexibility
- 4.2 Describe and recognize high-risk flexibility exercises
- 4.3 Explain the relationship between flexibility and lower back pain
- 4.4 Compare static versus dynamic stretching
- 4.5 Describe the stretching technique called proprioceptive neuromuscular facilitation

Overheads

Overhead  
Demonstration

Overhead

Overhead  
Demonstration  
Demonstration

**5.0 Nutrition**

Upon successful completion of this unit, students should be able to:

- 5.1 Identify types of sugars and provide some examples of each
- 5.2 Differentiate between soluble and insoluble fibre and give some examples of each
- 5.3 Discuss the difference between saturated and unsaturated fat and discuss their effects on cardiovascular disease
- 5.4 Identify the two types of unsaturated fat and describe their effect on cardiovascular disease

Handout -  
"The Basics of  
Nutrition"

**LEARNING ACTIVITIES**

- 5.5 List food sources that are rich in mono-unsaturated fat and polyunsaturated fat
- 5.6 Describe the role of Omega - 3 fatty acid on cardiovascular disease
- 5.7 Discuss the major functions of protein
- 5.8 Discuss the guidelines for healthy eating

**RESOURCES**

Handout -  
"The Basics of Nutrition"

Handout -  
"Canada's Food Guide"  
Overhead

**6.0 Weight Control**

Upon successful completion of this unit, the student should be able to:

- 1 Define body composition Overhead
- 2 Define essential and storage fat Overhead
- 3 Describe the relationship between body composition and wellness Overhead
- « : Explain the relationship of exercise and fat reduction Overhead
- Describe cycle dieting and discuss its effectiveness as a weight loss technique Overhead
- 6.6 Describe the guidelines that should be followed by the underweight when they attempt to gain weight Discussion
- 6.7 Evaluate the effectiveness of common weight loss gimmicks and "torture tools" Discussion

**METHODS OF EVALUATION**

Written Test #1	40%
Written Test #2	40%
Assignment #1 (personal fitness program)	20%
	100%

**NOTE**

Late assignments will be penalized 10% per day and will not be accepted after 7 days beyond the due date.

Attendance is mandatory and will be monitored by the Aviation Department,

**COLLEGE GRADING POLICY**

90 - 100% = A+

80 - 89% = A

70 - 79% = B

60 - 69% = C

BELOW 60% = R (Repeat Course) = U (Unsatisfactory)

**SPECIAL NEEDS**

Students with special needs (eg. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

**NOTE**

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.