

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: RECINATION AND PHYSICAL TRAINING
CODE NO.: REC 100 110 200 210 300 325
PROGRAM: AVIATION TECHNOLOGY
SEMESTERS: ONE TO SIX
DATE: SEPTEMBER 1989
AUTHOR: _____

NEW:

REVISION

APPROVED:

JA
CHAIRPERSON *q*

DATE **97A*/;?**

JUN 19 1989

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CALENDAR DESCRIPTION

<u>RECREATION & PHYSICAL TRAINING</u>	<u>REC 100</u>	<u>110</u>	<u>200</u>	<u>210</u>	<u>300</u>	<u>325</u>
<u>Course Name</u>	<u>Course Number</u>					

PHILOSOPHY/GOALS;

This is a compulsory physical training program. Students are required to participate in a variety of fitness and recreational activities in order to maintain or improve their fitness level. It is intended that the students learn to enjoy being active so that they will continue to pursue a fit life-style throughout their lives.

METHOD OF ASSESSMENT (GRADING METHOD):

Grading will be established using standard fitness tests.

Students must attain or exceed the 50'th percentile on the overall fitness test according to the Canadian Standardized test results i.e.: Norm Charts.

Fitness tests will be held three times per year (in September, December and April).

The major components of fitness will be included in the testing procedure - i.e.: cardiovascular endurance, muscular endurance, flexibility, and body composition.

I. COURSE DESCRIPTION

The intent of this course is to enhance 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 lifestyle.

II. STUDENT PERFORMANCE OBJECTIVES

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

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

III. 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

IV. LEARNING ACTIVITIES**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
- 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
- 1.7 Identify the role of exercise in reducing the risk of cardiovascular disease
- 1.8 Identify the role of exercise in managing other chronic diseases
- 1.9 Identify the factors which determine initiation and compliance to an exercise program
- 1.10 Identify reasons for "dropping out" of an exercise program
- 1.11 Describe motivational strategies to help you stick to an exercise program

2.0 Muscular Strength and Muscular Endurance

- 2.1 Describe the specific benefits of weight training
- 2.2 Define isotonic muscular contraction
- 2.3 Describe and demonstrate the concentric and eccentric phase of an isotonic muscular contraction
- 2.4 Define agonist and antagonist as they relate to muscle groups
- 2.5 Discuss the strength development of men compared to women
- 2.6 Discuss anabolic steroid use and the potential side-effects
- 2.7 Discuss the importance of warming-up and cooling-down when weight training
- 2.8 Describe and demonstrate a proper warm-up and cool-down
- 2.9 Describe circuit training and its advantages
- 2.10 Demonstrate an understanding of various weight training myths and fallacies
- 2.11 Demonstrate understanding of safe weight training practices
- 2.12 Identify and locate the major muscle groups of the body
- 2.13 Demonstrate the actions, weight training exercises, and stretches for each major muscle group

3.0 **Cardiovascular endurance**

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

- 3.1 Explain the differences between aerobic and anaerobic activities
- 3.2 Describe the production of ATP by both aerobic and anaerobic processes
- 3.3 Demonstrate two methods for determining one's Target Heart zone
- 3.4 Describe the application of the FITT formula for cardiovascular endurance
- 3.5 Describe the advantages of Cross-training
- 3.6 Discuss the importance of warming-up and cooling-down when participating in cardiovascular endurance training

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
- 4.6 Describe and demonstrate flexibility exercises for the major muscle groups and body joints

5.0 **Nutrition**

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

V. METHODS OF EVALUATION

Written #1 Test	30%
Written #2 Test	30%
Assignment #1 (personal fitness program)	20%
Assignment #2 (nutrition monitoring)	20%

NOTE:

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

VI. 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.