

Course syllabus: IB128, Sports Medicine

Instructor Charles E McLaughlin, M.D.

Lecturer in Sports Medicine, Dept of Integrative Biology, U.C. Berkeley Consultant to Fitness Testing Lab, U.C. Berkeley Volunteer Team Physician, Berkeley High School Athletics, 1995-2017 Clinical Practice in Family Medicine, Berkeley, California Author, Sports Medicine, Apple iBook Class Location to be determined Contact email mclaugh@berkeley.edu Textbook "Sports Medicine" by Charles E McLaughlin, available as Apple iBook

Office hours to be determined

Course description, this course will cover a wide variety of topics relative to athletic participation and athletes including exercise physiology, exercise and health, sports injuries (cause, evaluation, treatment options, current topics), Women's issues in sports medicine, nutrition, drug use and abuse, exposure to environmental factors including heat and altitude, introduction to career possibilities in sports medicine, introduction to design and evaluation of clinical studies in sports medicine.

Grading, two exams and one term paper all equal to one third of grade.

Class scores will be assigned a grade based on percentage of possible points:

A grade 90-100% B 80-89% C 70-79%

Resources, textbook required.

Additional material will be presented in class and appropriate references given.

Term paper will be on an appropriate topic of your choice and based on review of primary research studies on your chosen topic.

COURSE OBJECTIVES

- 1. Understanding basic principles of exercise physiology:
- A. Human adaptation to exercise
- B. Principles of fitness testing
- C. Concepts of exercise and health
- D. Illness associated with environmental factors
- 2. Develop a concept of functional anatomy
- 3. Survey of common sports injuries:
- A. Biomechanics of how injuries occur
- B. Pathophysiology of injuries
- C. Symptoms and signs of injury
- D. Recognizing warning signs of potentially serious injury
- E. Injury prevention and safety
- 4. Health Issues affecting athletes and all of us:
- A. Nutrition
- B. Drug abuse
- C. Health concerns of female athletes
- 5. Introduction to career possibilities in Sports medicine

6. Introduction to clinical research studies:

frequent review of published studies addressing current topics, emphasizing critical analysis of study design and data

7. Introduction to use of the internet for medical information

WEEKLY SCHEDULE

MAY 26	Introduction
	Defining Sports medicine
	Bioenergetics (physiology of exercise)
MAY 28	Conditioning/fitness
	Exercise and health
	Fitness testing
	Introduction to injuries
JUNE 2	Injuries: Shoulder, Arm
	wrist, hand
JUNE 4	Injuries: Hip, thigh
	Injuries: Head, neck, spine
JUNE 9	Injuries: Knee
	REVIEW
JUNE 11	MIDTERM EXAM
JUNE 16	Injuries: knee, lower leg,
	ankle, foot
JUNE 18	Issues Affecting Female Athletes
	(TERM PAPERS DUE)
JUNE 23	Nutrition
	Drug use and athletes
JUNE 25	Environmental illness;
	Heat, Dehydration, Altitude, Sun exposure
JUNE 30	REVIEW
JULY 2	FINAL EXAM