

SPORTS MEDICINE

(3+0 Cr. Hr)

COURSE OBJECTIVES

This course has been designed to make the students aware regarding the sports medicine subject and to give the knowledge of training and conditioning in sports. The course of sports medicine will also help in the development of the skills/knowledge regarding the sports injuries, their prevention, treatment, and rehabilitation. One of the main and very important objectives of this course is designed to aware the students regarding the use of doping in sports, their effects and legal position of the doping in sports.

COURSE CONTENTS:

i. INTRODUCTION

- a. Definition of Sports Medicine
- b. History of Sports Medicine

ii. INJURIES IN SPORTS

- a. Terminologies and Classification of Common Soft Tissue Sports Injuries
- b. General Effects of Injuries
- c. Regional injuries and their management
 - i. Injuries of Head
 - ii. Injuries of Ears
 - iii. Injuries of Eyes
 - iv. Injuries of Nose
 - v. Injuries of Back
 - vi. Injuries of Shoulders
 - vii. Injuries of Elbows
 - viii. Injuries of Hand
 - ix. Injuries of Abdomen
 - x. Injuries of Thighs
 - xi. Injuries of Knee
 - xii. Injuries of Leg
 - xiii. Injuries of Ankle

iii. PREVENTION OF INJURIES

- a. Role of Physical Educators and Coaches in the prevention of sports injuries
- b. Pre-conditioning injury prevention exercises
- c. Therapeutic exercises for prevention of Sports Injuries and their classification
- d. Principles of rehabilitation of injuries
- e. Therapeutic modalities in
 - i. Cryotherapy ,
 - ii. Hydrotherapy

- iii. Electrotherapy
- iv. Laser therapy
- v. Massage Therapy
- f. Warm up and Cooling Down

iv. EXERCISE AND FATIGUE

- a. Definitions
- b. Effects of exercise on sports performance
- c. Effects of fatigue on sports performance
- d. Heart role and exercise
 - i. Threshold for training effects on heart
 - ii. Cardiac reserve capacity
 - iii. Blood pressure and exercise.
- e. Lungs Role and Exercise
 - i. Lungs ventilation during rest and exercise
 - ii. Change in lungs diffusions during muscular activities

v. REHABILITATION IN SPORTS

- a. Principles of Rehabilitation
- b. Local Problems (Pain, Swelling, Restricted Movement)
- c. Non-Acute Cases

vi. EMERGENCY THERAPEUTIC MEDICINES TO MANAGE SPORTS INJURIES

- a. First Aid clinical management for Lung disorders due to sports activities
- b. First Aid clinical management for Cardiac disorders due to sports activities
- c. First Aid clinical management for gastrointestinal disorders due to sports activities
- d. First Aid clinical management for Skin disorders / accidents due to sports activities
- e. First Aid clinical management for Urogenital disorders due to sports activities

vii. DOPING IN SPORTS

- a. Definition
- b. Use of Doping in Sports
- c. Effect of Doping on Athletes
- d. Doping Control
- e. Types of Doping

RECOMMENDED BOOKS

1. Reeser, J. C., & Bahr, R. (Eds.). (2017). *Handbook of sports medicine and science, Volleyball*. John Wiley & Sons.
2. Harris, S. S., Anderson, S. J., & American Academy of Orthopaedic Surgeons. (2018). *Care of the young athlete*.
3. Whyte, G., Loosemore, M., & Williams, C. (Eds.). (2015). *ABC of sports and exercise medicine*. John Wiley & Sons.

4. Miller, M. D. (Ed.). (2016). *Orthopaedic knowledge update: sports medicine*. American Academy of Orthopaedic Surgeons.
5. Magee, D. J., Zachazewski, J. E., Quillen, W. S., & Manske, R. C. (2015). *Pathology and intervention in musculoskeletal rehabilitation* (Vol. 3). Elsevier Health Sciences.

CURRICULUM DEVELOPMENT IN PHYSICAL EDUCATION

(3+0 Cr. Hr)

COURSE OBJECTIVES

This course is designed with the purpose to acquaint students with basic concepts, theories and types of Health & Physical Education Curriculum related to development process and strategies adopted for evaluation and changes in curriculum as required.

COURSE CONTENTS:

- i. INTRODUCTION**
 - a. Definition, Objective of Physical Education Curriculum
 - b. Types of Curriculum
 - c. Factors effecting Physical Education Curriculum

- ii. PLANNING THE PHYSICAL EDUCATION CURRICULUM**
 - a. Curriculum Development, Tasks in curriculum planning
 - b. Coeducation planning, Curriculum opinion, Structuring for quality

- iii. CURRICULUM RESEARCH AND CHANGE**
 - a. Curriculum Reform, Experimentation in Physical Education
 - b. Contemporary social problems & Physical Education Curriculum

- iv. ORGANIZATION FOR INSTRUCTION**
 - a. Determining Scope, Sequence and scheduling the curriculum
 - b. Flexible Scheduling in Physical Education curriculum
 - c. The need for multiple teaching stations
 - d. Time Allotment for program Elements, Correlation and Integration
 - e. Organizational Design of the curriculum.

- v. THE CURRICULUM GUIDE**
 - a. Curriculum Design, preliminary consideration
 - b. The curriculum coordinating committee, collecting materials and constructing the guide

- vi. THE PHYSICAL EDUCATION PROGRAMME**
 - a. The physical education curriculum for Kindergarten, primary, Middle Grade, Secondary & Higher Secondary levels

- vii. EVALUATING THE CURRICULUM**
 - a. The intent of Measurement and Evaluation