

MPCC -102:
Course Title: SCIENTIFIC PRINCIPLES OF SPORTS TRAINING

Credit			Teaching Hours		
Lecture/Tutorials	Practical/Internship	Total	Lecture/Tutorials	Practical/Internship	Total
4	-	4	64	-	64

COURSE OBJECTIVES:

- To provide knowledge and concept of sports training.
- To develop an understanding of the technical and tactical training.
- To provide the role of sport sciences to achieve the excellence

UNIT I: Introduction Sports training

- Definition – Aim, Characteristics, Principles of Sports Training,
- Training Load: Types of Training Load, Factors affecting Training Load, Load and Adaptation
- Over Load
 - Definition
 - Causes of Over Load
 - Symptoms of Overload
- Recovery
 - Phases and means
- Type/ Classification of Training

UNIT II: Physical Fitness Components & their Development (Strength, Speed & Endurance)

- Strength: Meaning, definition, factor affecting and methods to improve Strength
- Speed: Meaning, definition, factor affecting and methods of Developing Speed
- Endurance: Meaning, definition, factor affecting and methods of improvements

UNIT III: Physical Fitness Components & their Development (Flexibility & Coordinative abilities) and Techniques & Tactics

- Flexibility: Meaning, Definition & Methods to Improve the Flexibility
- Special Type Training
 - Plyometric Training.
 - Circuit Training
- Coordinative abilities: Methods to improve Coordinative abilities.
- Technique
 - Skill and Style
 - Aim in Sports
 - Technique Training
 - Methods of Technique Training
- Strategy & Tactics
 - Aim
 - Training for Tactics
- General & Applied Tactics and their implication

UNIT IV: Training Plan & Introduction to Doping

- Training Plan: Meaning & Importance, Micro-Cycle, Macro-Cycle, Meso-Cycle
- Short term plan and Long Term Plans
- Periodization:
 - Meaning
 - Types
 - Phases
 - Preparatory
 - Competition
 - Transition

TEXT & REFERENCES:

- BeotraAlka, (2000), Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India.
- Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc. Cart, E. Klafs&Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosphy Company
- Daniel, D. Arnheim (1991) Principles of Athletic Training, St. Luis, Mosby Year Book
- Wuest, D., & Fisette, J. (2014)Foundations of physical education, exercise science, and sport. McGraw-Hill Higher Education; ISBN-10: 0073522775ISBN-13: 978-0073522777
- Bompa, T., & Haff, G. (2009). Periodization. Champaign, IL.: Human Kinetics. ISBN-13: 9780736074834
- Haff, G., & Triplett, N. Essentials of strength training and conditioning. Champaign, IL.: Human Kinetics.ISBN-13: 9780736065832
- Bompa, T., & Carrera, M. (2005). Periodization training for sports. Champaign, Ill.: Human Kinetics.
- Zatsiorsky, V., & Kraemer, W. (2006). Science and practice of strength training. Champaign, IL: Human Kinetics. ISBN 10: 0736056289

