

**Semester – I**  
**PART – A: THEORY ELECTIVE COURSE**

**BTE-101: SPORTS NUTRITION AND WEIGHT MANAGEMENT (ELECTIVE)**

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	Int.	Ext.	Total
4	-	4	64	-	64	30	70	100

Lecture/Tutorials, P/I=Practical/Internship, Int.=Internal, Ext.=External

**ESSENCE OF THE COURSE**

This course will enable students to understand the modern concept of sports training. It aims to develop understanding about the aim and objective of sports training, principles of sports training, system of sports training, training components, training process and training programming and planning.

**COURSE LEARNING OUTCOME**

**After completing this course, the students will be able to**

- understand the modern concept of sports training.
- describe the principles of sports training.
- evaluate and develop system of sports training – basic performance, good performance and high performance training.
- plan training sessions.
- realize and apply the Methods of Technique Training.
- design different training program for Training Components.
- explain Periodization and its types.
- identify talents.

**COURSE CONTENTS**

**Unit – I Introduction to Sports Nutrition**

- Meaning and Definition of Sports Nutrition
- Basic Nutrition guidelines
- Role of nutrition in sports
- Factor to consider for developing nutrition plan

**Unit – II Nutrients: Ingestion to energy metabolism**

- Carbohydrates, Protein, Fat – Meaning, classification and its function
- Role of carbohydrates, Fat and protein during exercise
- Vitamins, Minerals, Water – Meaning, classification and its function
- Role of hydration during exercise, water balance, Nutrition – daily caloric requirement and expenditure.

### **Unit – III Nutrition and Weight Management**

- Meaning of weight management Concept of weight management in modern era Factor affecting weight management and values of weight management
- Concept of BMI (Body mass index), Obesity and its hazard, Myth of Spot reduction, Dieting versus exercise for weight control, Common Myths about Weight Loss
- Obesity – Definition, meaning and types of obesity,
- Health Risks Associated with Obesity, Obesity - Causes and Solutions for Overcoming Obesity.

### **Unit – IV Steps of planning of Weight Management**

- Nutrition – Daily calorie intake and expenditure, Determination of desirable body weight
- Balanced diet for Indian School Children, Maintaining a Healthy Lifestyle
- Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss

### **TEACHING LEARNING STRATEGIES**

- The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

### **SUGGESTED MODE OF TRANSECTION**

- Lectures/ Tutorials/ Field Work/ Outreach Activities/ Vocational Training/Viva/ Seminars/ Assignments/ Presentations/ Self-Study etc.

### **ASSESSMENT RUBRICS**

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|--|---|
| ● End Semester Exam  | <b>Marks: 100 (70+30)</b><br><b>Marks: 70</b> |
| ● Classroom Test, Project Work, Assignments, Presentations | <b>Marks: 30 (10+20)</b>                      |
| ○ Classroom Tests: Best one out of two unit tests          | <b>(Marks: 10)</b>                            |
| ○ Project Work, Assignments, Presentations                 | <b>(Marks: 20)</b>                            |

### **SUGGESTED READINGS**

- Bessesen, D. H. (2008). Update on obesity. *J Clin Endocrinol Metab.*93(6), 2027-2034.
- Butryn, M.L., Phelan, S., & Hill, J. O. (2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity(Silver Spring)*. 15(12), 3091-3096.
- Chu, S.Y. & Kim, L. J. (2007). Maternal obesity and risk of stillbirth: a metaanalysis. *Am J Obstet Gynecol*, 197(3), 223-228.
- DeMaria, E. J. (2007). Bariatric surgery for morbid obesity. *N Engl J Med*,356(21), 2176-2183.
- Dixon, J.B., O'Brien, P.E., Playfair, J. (n.d.). Adjustable gastric banding and conventional therapy for type 2 diabetes: a randomized controlled trial. *JAMA*. 299(3), 316-323.