## Semester II

Sr. No.	Course	No of lecture	T.C.	Th Cr.	Pr. Cr	Internal marks	External marks	Total marks
		Core	Com	pone	ent			
1	Nutrition in Health and Disease	60	4	4	-	50	50	100
2	Nutrition for Sports and Exercise Th	60	4	4	-	50	50	100
3	Nutrition for Sports and Exercise Pr	120	4	-	4	50	50	100
4	Weight Management, Rehabilitation and Fitness Th	60	4	-	4	50	50	100
5	Weight Management, Rehabilitation and Fitness Pr	120	4	-	4	50	50	100
6	CBCS: Sports Psychology and Counseling/ Research Methodology/ SWAYAM	60	4	-	4	50	50	100
		Value	 Adde	l Co	urses	<u> </u>		
1	Scientific Writing	60	4	-	4	50	50	100

Course Name: NUTRITION IN HEALTH AND DISEASE

**Course Code: SSFN201** 

#### **Course Description**

The course is designed to provide concepts of an intermediate study of nutritional therapy of disease. Course content includes evidence based practice in prevention and nutritional management of diseases

#### **Course Outcome**

At the end of the course, the learner will be able to:

- Describe the role of diet in disease prevention and treatment across the continuum of dietrelated health conditions from primary, secondary and tertiary care.
- Apply all elements of nutrition screening and assessment within context of the Nutrition Care process for identifying the diseased condition.
- Design and implement appropriate communication, counseling and education skills to patient care with specific disease conditions

Code No.	Course	No of lec	T.C.	Th Cr.	Pr. Cr	Internal	External	Total
SSFN201	Nutrition in Health & Disease	60	4	4	-	50	50	100

#### **Contents:**

Water regulation in human body, fluid imbalance & Body composition (15 lecture)

Module No	Objectives	Contents	Evaluation
1	This module will enable students to:  a) Understand the concept of fluid balance electrolyte balance and acid base balance in the human body and various disorders caused due to their imbalance. b) Understand the changes in body composition in the human body throughout the life cycle. Understand the basics of Dehydration and Diarrhea.	Fluid balance, electrolyte balance and acid-base balance  Body composition- changes through the lifecycle  Diarrhoea and dehydration	Students Will be evaluated based on their performance in Quizes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

## Energy Metabolism (15 lectures)

Module No.	Objective	Content	Evaluation
2	This module will enable students to:  a) Understand the concept of Energy Metabolism, Energy Balance and changes in energy requirements throughout the life cycle.  b) Understand the basics of nutritional care	Energy Metabolism:  1.Energy: Metabolic Concept and Measurements  Body's need of energy  Metabolic processes to yield energy (in brief)  Units of Energy  2.Energy Needs of the Body: BMR, REE, Voluntary activities, Influence of food, Energy requirements across the life span and	Students Will be evaluated based on their performance in Quizes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

### Diabetes Mellitus (15 lectures)

Module No.	Objective	Content	Evaluation
3	This module will enable students to:  Understand the basics, etiological factors and principles of nutritional care involved in Diabetes Mellitus and various Heart Disease.	Diabetes Mellitus  Definition, Classification and indicators, etiological factors, basic principles of nutritional care Dyslipidemias, Hypertension and Heart disease  Definition and indicators, etiological factors, principles of nutritional care	Students Will be evaluated based on their performance in Quizes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

Introduction to renal disorder, Bone health, Cancer (15 lecture)

Module No.	Objective	Content	Evaluation
4	This module will enable students to:  Understand the basics, etiological factors and principles of nutritional care involved in Renal disorders, Cancer and Bone disorders.	Introduction to renal diseases  Nomenclature, definition, indicators and basic principles of nutritional care  Nutrition and Bone health (preventive aspects)  Nutrition and Cancer (preventive aspects)	Students Will be evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

#### **Evaluation**

Evaluation	Details	Marks
Internal	Unit test (offline/ online)	25
	Continuous evaluation: Projects/ Quiz/ Class tests/ Assignment & Presentations.	25
External	Written examination test	50
	Total marks	100

#### **References:**

- 1. Mahan, L.K. and Escott-Stump, S. (2000): Krause's Food Nutrition and Diet Therapy, 10<sup>th</sup> Edition, W.B. Saunders Ltd.
- 2. Shils, M.E., Olson, J.A., Shike, M. and Ross, A.C. (1999): Modern Nutrition in Health and Disease, 9<sup>th</sup> Edition, Williams and Wilkins.
- 3. Escott-Stump, S. (1998): Nutrition and Diagnosis Related Care, 4<sup>th</sup> Edition, Williams and Wilkins.

- 4. Garrow, J.S., James, W.P.T. and Ralph, A. (2000): Human Nutrition and Dietetics, 10<sup>th</sup> Edition, Churchill Livingstone.
- 5. Williams, S.R. (1993): Nutrition and Diet Therapy, 7<sup>th</sup> Edition, Times Mirror/Mosby College Publishing.
- 6. Davis, J. and Sherer, K. (1994): Applied Nutrition and Diet Therapy for Nurses, 2<sup>nd</sup> Edition, W.B. Saunders Co.
- 7. Walker, W.A. and Watkins, J.B. (Ed) (1985): Nutrition in Pediatrics, Boston, Little, Brown & Co.
- 8. Guyton, A.C. and Hall, J.E. (1999): Textbook of Medical Physiology, 9<sup>th</sup> Edition, W.B. Saunders Co.
- 9. Ritchie, A.C. (1990): Boyd's Textbook of Pathology, 9<sup>th</sup> Edition, Lea and Febiger, Philadelphia.
- 10. Fauci, S.A. et al (1998): Harrison's Principles of Internal Medicine, 14th Edition, McGraw Hill.
- 11. World Cancer Research Fund (1997). Food, Nutrition and the Prevention of Cancer- A Global perspective, Washington E.D. WCRF.

#### Journals and Other Reference Series

- 1. Nutrition Update Series
- 2. World Review of Nutrition and Dietetics
- 3. Journal of the American Dietetic Association
- 4. American Journal of Clinical Nutrition
- 5. European Journal of Clinical Nutrition
- **6.** Nutrition Reviews

#### **Course Name: NUTRITION FOR SPORTS AND EXERCISE (TH)**

**Course Code: SSFN202** 

#### **Course Description**

The course is designed to examine the application of nutritional regimens to meet exercise requirements and improve athletic performance. Current practice and recommendations for different types of sports will be examined

#### **Course Outcome:**

At the end of the course, the learner will be able to:

- Describe energy intake, expenditure, and recommendations as it relates to energy balance of athletes.
- Explain the effect of exercise on fluid balance and outline strategies for maintaining fluid balance before, during, and after exercise.
- Understand the role of exercise, weight, and body composition on the performance, health, and disease of sports athlete.
- Explain the loss, intake, and recommendations for minerals, vitamins, and supplements for athletes.

Code No.	Course	No	T.C.	Th	Pr.	Internal	External	Total
		of		Cr.	Cr			
		lec						
SSFN202	Nutrition for Sports & exercise	60	4	4	-	50	50	100

## Energy system, fluid balance and fuel metabolism (10 lectures)

	Energy system, juna but		
Module	Objectives	Contents	Evaluation
No	•		
1	This module will enable students to:  a) Understand the different energy systems required during different sports activities. b) Understand the basics of fluid balance, its importance and preventive measures during the course of dehydration.	Introduction, Nutritional considerations for sports / exercising person as compare to normal active person.  Energy substrate for activities of different intensity and duration, aerobic and anaerobic activities.  Fluid balance in sports and exercise, importance, symptoms and prevention of dehydration, Sports drink.	Students Will be evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

## Carbohydrates in sports (20 lectures)

Module No.	Objective	Content	Evaluation
2	This module will enable students to:  a) Understand the basics of metabolism of carbohydrate and its requirement during pre and post exercise.	Macro Nutrients-Carbohydrate as an energy source for sport and exercise. Carbohydrate stores, Fuel for aerobic and anaerobic metabolism, Glycogen re-synthesis, CHO Loading, CHO composition for pre exercise, during and recovery period.	Students Will be evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

## Proteins and fat in sports (15 lectures)

Module No.	Objective	Content	Evaluation
3	This module will enable students to:  a) Understand the basics of metabolism of fat and protein and its requirement during pre and post exercise.	Role of Fat as an energy source for sports and exercise. Fat stores, regulation of fat metabolism, factors affecting fat oxidation (intensity, duration, training status, CHO feeding), effect of fasting and fat ingestion  a) Protein and amino acid requirements, Factors affecting Protein turnover, Protein requirement and metabolism during endurance exercise, resistance exercise and recovery process. Protein supplement.	Students Will be evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

### Micronutrients, ergogenic aid and eating disorder in sports (15 lectures)

Module No.	Objective	Content	Evaluation
4	This module will enable students to:  a. Understand the role of micronutrients in the body of the sports individual.  b. Understand the concept of chronic dieting and eating disorder commonly seen in sports individual and common dietary supplements and ergogenic aids available and used by sports individual.	Important micronutrients for exercise. B complex vitamin and specific minerals. Exercise induced oxidative stress and role of antioxidants  Chronic dieting and eating disorder. Female athletic triad, sports anemia  Dietary supplements and ergogenic aids (nutritional, pharmacological and physiological)	Students Will be evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

#### **Evaluation**

Evaluation	Details	Marks
Internal	Unit test (offline/ online)	25
	Continuous evaluation: Projects/ Quiz/ Class tests/ Assignment & Presentations.	25
External	Written examination test	50
	Total marks	100

#### References

- 1. Bucci, L., 1993 Nutrients as Ergogenic Aids for Sports and Exercise. Boca Raton, FL.:CRC Press
- 2. Advances in Sport and Exercise Science : Nutrition and Sport , Edited by Don MacLaren. , ChPublished by Churchhill Livingstone, Elsevier. 2007
- 3. Sports Medicine: The school age athlete by Bruce Reider. 1996. Published by W.B. Saunders.
- 4. Nutrition for Serious Athletes. Dan Banardot. 2000; Human Kinetics.
- 5. Energy-Yielding Macronutrients and Energy Metabolism in Sports Nutrition. Edited by Judy A Driskell, Ira Wolinsky, CRC Press 2000.
- 6. Recommended Dietary Intakes for Indian Sportsman and Women. Satyanarayan, K; Nageshwar Rao. C; Narsinga Rao,B.S.; Malhotra, M.S. (1985)., Hyderabad, National Institute of Nutrition.

#### Course Name: NUTRITION FOR SPORTS AND EXERCISE PRACTICALS

**Course Code: SSFN203** 

#### **Course Description**

The course is designed to examine the application of nutritional regimens to meet exercise requirements and improve athletic performance. Current practice and recommendations for different types of sports will be examined

#### **Course Outcome:**

At the end of the course, the learner will be able to:

- Assess the nutritional status and body composition of athletes to understand their nutritional requirements.
- Design a plan tailored for the athlete as per their dietary habits, nutritional needs and sports type.
- Evaluate and monitor the effectiveness of the dietary plan on the performance of athletes and people involved in fitness exercises.

Code No.	Course	No of lec	T.C.	Th Cr.	Pr. Cr	Internal	External	Total
SSFN203	Nutrition for Sports & Exercise (P)	120	4	-	4	50	50	100

## Principles of meal planning for different sports (40 lectures)

Module No.	Objective	Objective Content				
1	This module will enable students to:  a) Plan meal and recipes of different caloric values required by a sports individual for various sports activities. b) Gain knowledge about various sports supplements available in the market and their	Meal Planning for regular training, balance diet of different caloric value for specific sports and exercising person (gymnast, runner, swimmer, sprinter, middle/distance/long distance marathon, weight lifter, boxer, cricketer, golfer, archery, throwing events, hockey, football and aerobic and strength training exercise)  Market survey on various sports supplements and ergogenic aids.	Students will be evaluated on basis of diet plan submission/ journal competition/ assignments/ planning exams			
	use in sports industry.					

## Macronutrient planning (40 lectures)

Module No.	Objective	Content	Evaluation
2	This module will enable students to:  Understand and prepare carbohydrate and protein rich meal keeping in mind their specific roles during pre and post event.	Carbohydrate rich diet, cyclic menu, low glycemic load and high glycemic load CHO loading Pre event meal and liquid meal. Post event meal, high energy meal Protein rich meal.	Students will be evaluated on basis of diet plan submission/ journal competition/ assignments/ planning exams

## Sports bars & Drinks (40 lectures)

Module No.	Objective	Content	Evaluation
3	This module will enable students to:  1. Plan and prepare bar and drinks required by a sports person during various sports activities	Sports Bar-energy bar, protein bar and Nutri bar  Sports drink- Hypo, iso and hypertonic drink for hydration/ energy and recovery drink  Antioxidant rich diet	Students will be evaluated on basis of diet plan submission/ journal competition/ assignments/ planning exams

## **EVALUATION**

Evaluation	Details	Marks
Internal	Journal work & assignment/ project submission	50
External	Practical examination test & Viva voce	50
	Total marks	100

#### Course Name: WEIGHT MANAGEMENT, REHABILITATION AND FITNESS (TH)

**Course Code: SSFN204** 

#### **Course Description:**

The course includes theoretical knowledge of Health, Anatomy, Physiology, Fitness, Medicine, Nutrition and Psychology which influences decision regarding improvement of fitness and performance level of athletes. It also renders its influence on the activity level and fitness of individuals of all ages.

#### **Course Outcome**

At the end of the course, the learner will be able to:

- Explain the dynamics of exercise and its role in fitness.
- Enable sportsmen/athletes and individuals who exercise to use optimum energy to maximize performance under normal and stressed conditions while minimizing injury
- Develop professional expertise in weight management, rehabilitation and fitness students can understand the psychological problems during extreme physical and mental stress
- Discuss the therapeutic benefits of exercise and Students can utilize knowledge of biomechanics
- Understand the physiological effects of exercise on human body composition.

Code No.	Course	No	T.C.	Th	Pr.	Internal	External	Total
		of		Cr.	Cr			
		lec						
SSFN204	Weight	60	4	4	-	50	50	100
	Management &							
	Rehabilitation							

#### Energy homeostasis (15 lectures)

Module	Objectives	Contents	Evaluation
No			

1	This module will enable	Regulation of energy intake	Students Will be evaluated
	students to:	and expenditure, control of	based on their performance
	) T 1 4 141	appetite and food intake,	in Quizzes/ Class tests/ Unit
	a) To understand the feeding behavior,	Foods selection and	test/ Projects/ literature
	energy homeostasis	consumption pattern	reviews Assignments/
	and regulation of	TT 1	Presentations assigned/
	food intake	Hormonal control: Insulin,	conducted for each module
		Thyroid & estrogen,	

## Nutrition for weight management (15 lectures)

Module No.	Objective	Content	Evaluation
2	This module will enable students to:  a) Understand the types of obesity, theories related to obesity and a multi-dimensional approach for its management.	Adult and Childhood obesity, Prevalence, Types, etiology, Theories of obesity, Factors affecting, Co- morbidity.  Management through- Long term and short term measures, Nutrition, Exercise, pharmaceutical, Surgical, Stress Mgt. & Lifestyle modification.	Students Will be evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

## Principles of nutrition care for weight watchers (15 lectures)

Module No.	Objective	Content	Evaluation
	This module will enable	Critical evaluation of standard	Students Will be
	students to:	weight loss diets commonly	evaluated based on their
	a) Evaluation of various weight loss diets	followed by weight watchers.  Care and cure in rehabilitation,	performance in Quizzes/ Class tests/ Unit test/ Projects/ literature

3	followed by weight	precaution. Necessity	reviews Assignments/
	watchers, its curative	of continuous	Presentations assigned/
	and preventive	monitoring and	conducted for each
	measures.	necessary emergency procedures.	module
		•	

## Components of fitness (15 lectures)

Module No.	Objective	Content	Evaluation
4	This module will enable students to:  Understand the various components of fitness and its co relation in an athletic life.	Components of fitness- Total Fitness (health related fitness) and Athletic fitness.  Body Composition and types, Cardiorespiratory Fitness, Muscular endurance and power, Flexibility.  Athletic Fitness- Balance, Coordination, Agility, reaction Time etc.	Students Will be evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

## **EVALUATION**

Evaluation	Details	Marks
Internal	Unit test (offline/ online)	25
	Continuous evaluation: Projects/ Quiz/ Class tests/ Assignment & Presentations.	25
External	Written examination test	50
	Total marks	100

#### References

- 1. Edward L. fox and Donald K Mathews (1985). CBS College Publishing. Japan
- 2. Present Knowledge in Nutrition; Ed, Myrtle L. Brown, ILSI Press.
- 3. David C. Nieman , Fitness and Sports Medicine, A Health related Approach ( 3<sup>rd</sup> edition, 1995
- 4. Bases of fitness- Edward L. fox, Timothy E. Kirby and Ann Roberts Fox (1987)
- 5. Measurement and evaluation for Physical Educators Don Kirkendall, Joseph J Gruber and Robert E. Johnson. 1987. Human kinatics Publishers Inc.
- 6. The Physiological Basis of Physical Education and Athletics, by E.L.Fox and D.K.Mathews, Holt-Saunders, 1981

## Course Name: WEIGHT MANAGEMENT, REHABILITATION AND FITNESS PRACTICALS

**Course Code: SSFN205** 

#### **Course Description:**

The course includes practical knowledge of Health, Anatomy, Physiology, Fitness, Medicine, Nutrition and Psychology which influences decision regarding improvement of fitness and performance level of athletes. It also renders its influence on the activity level and fitness of individuals of all ages

#### **Course Outcome**

At the end of the course, the learner will be able to:

- Assess the physical fitness of individuals and group by using different physical fitness tests and techniques.
- Discuss various ways to improve the basic components of physical fitness: cardiovascular condition, muscle flexibility, muscle strength and endurance, and body composition.
- Explain the importance of correct method of implementation of exercise to acquire maximum output and minimum risk of any injury.
- Apply the knowledge to prevent and manage injury done to the individual at a primary level during exercise.

	Course	No of lec	T.C.	Th Cr.	Pr. Cr	Internal	External	Total
SSFN205	Weight management & Rehabilitation (P)	120	4	-	4	50	50	100

## Detailed discussion for obesity (30 lectures)

Module No.	Objective	Content	Evaluation
1	This module will enable students to:  a) Gain an understanding of the different equipment's used in fitness industry. b) Understand the concept of obesity and calculation of desirable body weight. c) Understand the various types of exercise available with their role in fitness.	Equipment's commonly used in Fitness Industry, their advantages and limitation.  Classification of obesity according to BMI. Assessment of body fat by different method, Fat distribution, Ideal body weight calculation using BMI, Body fat % and Broca's Index.  Calculation of desirable body weight.  Types of Exercise including Aerobics, spinning, Tai Chi, Yoga, Power Yoga, Pilate, Strength training, Pyramid training, Circuit training, etc	Students will be evaluated on basis journal assignments/ activities performed

## Cardiorespiratory fitness (30 lectures)

Module No.	Objective	Content	Evaluation
	This module will enable students to:	Exercise for : Cardio-respiratory fitness	Students will be evaluated on basis journal
2	a. Understand and perform the basic exercises required for cardio respiratory fitness and strengthening of joints and bones.	Strengthening the joints and bones and increasing flexibility.	assignments/ activities performed

Exercise for weight management (30 lectures)

Module No.	Objective	Objective Content			
	This module will enable students to:	Exercise for weight gain / muscle development and improving muscle	Students will be evaluated on basis		
3	Understand and perform the basic exercises required for toning of muscles as well as for weight loss.	tone  Exercise for weight loss	journal assignments/ activities performed		

The exercise prescription (30 lectures)

Module No.	Objective	Content	Evaluation
3	This module will enable students to:  a) Understand and perform the basic exercises required for certain therapeutic conditions.	Therapeutic exercise and program designing for specific demands including specific joint problems, osteoporosis, arthritis, blood pressure, PCO, Diabetes and Cardio Vascular Disease.  Precaution and indicators for stopping exercise and necessary emergency procedures.	Students will be evaluated on basis journal assignments/activities performed

## **EVALUATION**

Evaluation	Details	Marks
Internal	Journal work & assignment/ project submission	50
External	Practical examination test & Viva voce	50
	Total marks	100

#### COURSE TITLE: SPORTS PSYCHOLOGY & COUNSELING

**COURSE CODE: 206 A** 

#### **Course Description**

The course is designed to facilitate in learning about factors that affect sport and performance.

- It will enable the students to understand how sports psychology influences sports, athletic performance, exercise and physical activity.
- Use of psychological approach in sports can improve motivation to the sports person

#### **Course Outcome**

At the end of the course, the learner will be able to:

- Describe the nature of sports psychology and identify psychological traits which can be useful for athletic performance.
- Recommend and advice ways of maintaining or increasing motivation in an athlete
- Differentiate between positive and negative application of aggressive emotions in sports
- Explain the impact on performance of psychological interactions within a team.

Code No.	Course	No of lec	T.C.	Th Cr.	Pr. Cr	Internal	External	Total
SSFN206 A	Sports Psychology	60	4	4	-	50	50	100

#### **EVALUATION**

Evaluation	Details	Marks
Internal	Unit test (offline/ online)	25
	Continuous evaluation: Projects/ Quiz/ Class tests/ Assignment & Presentations.	25
External	Written examination test	50

## Module 1:

## **Emotion in Sports**

## (15 lectures)

Objective	Content	Evaluation
This will enable students to:  Understand the emotional content of sports	a. Sports Psychology Importance and need of Psychological Training in Sports.  The Emotional Contents of Sports: Intrinsic Pressures, Social Pressures & Personal Pressure.  Mind- The mechanics of Flight or Fight Response, The Physical Disruptions and the Mental Disruptions.  The Sports Emotional – Reaction profile: Factors affecting performance like Desire, Assertiveness, Sensitivity, Tension Control Personal Accountability, Self-discipline, Confidence, Concentration, Consistency, Commitment and Trait Interaction.	Students Will be evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

# Module 2: Addressing the problem (15 lectures)

Objective	Content	Evaluation
This will enable students	Understanding the problems of Sportsman -	Students Will be
to understand	Lack of adequate motivation and concentration,	evaluated based on their
	Fear of Insecurity & Rejection, Fear of Making a	performance in Quizes/
a. Understand the type of	wrong move, Not able to make the use of	Class tests/ Unit test/
problems that a sport-	maximum available resources (Physical & Mental)	Projects/ literature
person undergoes and		reviews Assignments/
		Presentations assigned/

its impact on sports	Psychological Barriers between student & teacher	conducted for each
performance	and Drugs	module
_		

## Module 3: Counselling (15 lectures)

Objective	Content	Evaluation
This module will enable students to:  a. understand the methods and techniques to be used	Counselling in sports:  Importance & Need of Psychological Counselling, Types of Counselling like Individual, Group, Team etc.	test/ Projects/ literature reviews Assignments/
for counselling a sports person	Effective Counselling Methods & Techniques, Case studies, Role Plays and Discussion.	Presentations assigned/ conducted for each module

# Module 4: Overcoming Challenges (15 lectures)

Objective	Content	Evaluation
This module will enable students to:  a. develop effective strategies and plan to help a sport person to overcome	Mental Preparation for the Game and  Mental Practice for the play.  Rational Emotive Mental Training Programme' for sportsman using Mind-Body co-ordination	Students Will be evaluated based on their performance in Quizes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/
psychological challenges	Techniques to Improve Performance - creative Visualisation, Desensitization, Autosuggestion Therapy, Rational Thinking for	

specific purpose and Progressive Relaxation procedure	conducted for each module

#### References

- 1. Sports Psychology by Yadvinder Singh, Publisher: Sports Publications
- 2. Sports Psychology Basics Andrew Caruso Publisher: Reedswain
- 3. Key Concepts In Sports Psychology by Ellis Cashmore Publisher: Routledge Foundation
- 4. <u>A Comparative Study Of Sports Psychology</u> by Dharmendra P Bhatt Publisher: Sports Publications
- 5. Basic Aspect Of Sport Psychology by D C Lal Publisher: Sports Publications
- 6. Essential Sport Psychology by Murphy Shane Publisher: Human Kine
- 7. Doing Sport Psychology by Andersen Mark Publisher: Human Kine
- 8. Sport Psychology: Contemporary Themes by Lavallee David Publisher: Palgrave M
- 9. Sport Psychology Interventions by Murphy Shane M Publisher: Human Kine
- 10. Sport Psychology (with Infotrac) by Arnold D Leunes Publisher: Wadsworth Publishing Company
- 11. <u>Coaches Guide To Sport Psychology</u> by Rainer Martens Publisher: Human Kinetics Publishers
- 12. <u>Learning Experiences In Sport Psychology Publisher: Human Kine</u>
- 13. Sport Psychology: The Key Concepts by Cashmore Ernest Publisher: Routledge
- 14. <u>Applied Sport Psychology: Personal Growth To Peak Performance</u> by 4th Edition Williams Publisher: Academic Internet Publishers

#### COURSE TITLE: RESEARCH METHODOLOGY (Th)

Course Code: SSFN206 B

#### **Course Description:**

The course designed to impart education in the foundational methods and techniques of academic research in social science context.

#### **Course Outcome:**

At the end of the course, the learner will be able to:

- Understand the of the basic framework of research process.
- Students will understand various research designs and techniques. •
- Students will identify various sources of information for literature review and data collection.
- Students will develop an understanding of the ethical dimensions of conducting applied research.

Code No.	Course	No	T.C.	Th	Pr.	Internal	External	Total
		of		Cr.	Cr			
		lec						
SSFN206	Research	60	4	4	_	50	50	100
В	Methodology							

#### **EVALUATION**

Evaluation	Details	Marks
Internal	Unit test (offline/ online)	25
	Continuous evaluation: Projects/ Quiz/ Class tests/ Assignment & Presentations.	25
External	Written examination test	50
	Total marks	100

### **Contents**

## <u>Module 1:</u> <u>The research process: Steps, Elements & Ethics</u> <u>(15 lectures)</u>

Objectives	Objectives Topics	
This module enables	The Research Process	Students Will be
a. understand the entire process of research in a systematic manner	<ul><li>a. Scientific approach to enquiry in comparison to native, common sense approach</li><li>b. Knowledge, theory and research</li></ul>	evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews
b. Understand concepts, procedure, hypothesis formulation and other necessary components required for designing research project.	c. Role, need and scope of research in the discipline of Home Science  Assignment: Differentiate between investigative reporting and research report (with examples to be brought by students as exercise)	Assignments/ Presentations assigned/ conducted for each module
	Steps in Research Process and Elements of Research	
	a. Identifying interest areas and prioritizing	
	Selection of topic and considerations in selection	
	b. Review of related literature and research	
	variables- types of variables including discrete and continuous variables	

Conceptual definitions and operational definitions	
contopoum derminons und operational derminons	
d. Concepts, hypotheses and theories	
e Hypothesis- meaning, attributes of a sound	
hypothesis, Stating the hypothesis and types of	
hypothesis	
Hypothesis testing- null hypothesis, sample	
distribution, level of significance, critical regions,	
Type I and Type II errors	
Type I and Type II errors	
f. Research Design	
Research questions, objectives and assumptions	
Assignment: Types of variables	
Hypothesis formations and research questions from	
Research readings – students identify	
hypothesis/research questions – Discussion	
Ethics in Research	

## Module 2: Research types

## (15 lectures)

Objectives	Topics	Evaluation
This module	Types of Research	Students Will be
enables students to:	a. Basic and Applied research, Qualitative and Quantitative research (brief review of differences)	evaluated based on their performance in Quizzes/ Class

understand various types of research design that can be implemented in a research project b. Historical research

- c. Descriptive research methods survey, case study, correlational study, content analysis, causal-comparative research
- d. Analytic studies- pre-experimental, experimental research, quasi experimental research
- e. Qualitative research, Ethnography
- f. Evaluative research- general characteristics, use of qualitative methods in enquiry

Scope and importance in Home Science

**Assignment:** Differentiate between (a) basic and applied research (Exercise to be based on actual research papers published in accredited journals)

(b) qualitative and quantitative

research

Based on Journal contents undertake a critical appraisal of studies/research papers and discuss types of Research with examples

tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

## Module 3: Sampling: Types & techniques

## (15 lectures)

Objective	Content	Evaluation
This module enables student to: understand zsamplin g procedur e in detail	Sampling  a. Rationale, characteristics- meaning, concept of population and sample, and utility  b. Types of sampling and generalizability of results  c. Probability sampling - simple random sample, systematic random sample, stratified random sampling etc - random and non-random samples, random numbers and use  d. Non-probability sampling - purposive samples, incidental samples, quota samples, snowball samples  e. General consideration in determination of sample size	Students Will be evaluated based on their performance in Quizes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module
	e. General consideration in determination of sample size	

## Module 4:

## Data collection

## (15 lectures)

Objective	Content	Evaluation
This module enables students to:  Understand various tools that are available and can be used for data collection for	a. Primary and secondary methods of data collection b. Different types of questionnaires, rating scales, check lists, schedules, attitude scales, inventories, standardized tests, interviews, observation c. Development of tools, estimation of reliability and validity of tools d. Procedure for preparation of the tool, administration of tools for data collection e. Procedure for data collection f. Planning for data analysis-coding of responses	Students Will be evaluated based on their performance in Quizzes/ Class tests/ Unit test/ Projects/ literature reviews Assignments/ Presentations assigned/ conducted for each module

research	
work.	

#### References

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- 2. Bell, J. (1997): How to Complete Your Research Project Successfully: A Guide for First-time Researchers, UBSPD, New Delhi.
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- 4. Festinger, L. and Katz, D. (ed.) (1977): Research Methods in the Behavioral Sciences, Amerind Publishing, New Delhi.
- 5. Holloway, I. (1997): Basic Concepts of Qualitative Research, Blackwell Science, London.
- 6. Jain, G. (1998): Research Methodology: Methods and Techniques, Mangal Deep, Jaipur.
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