

FATIMA COLLEGE (AUTONOMOUS)



**Re-Accredited with “A” Grade by NAAC (3rd Cycle)
74th Rank in India Ranking 2020 (NIRF) by MHRD
Maryland, Madurai- 625 018, Tamil Nadu, India**

NAME OF THE DEPARTMENT : THE RESEARCH CENTRE OF HOME SCIENCE

NAME OF THE PROGRAMME : M.Sc. HOME SCIENCE

PROGRAMME CODE : PSNN

ACADEMIC YEAR : 2020 - 2021

Minutes of the Board of studies - Upgradation of syllabus 2020-21 - Research Centre of Home Science.

The Board of Studies meeting for the upgradation of the syllabus was convened in the Research Centre of Home Science on Feb 28, 2020, for the forthcoming academic year 2020-2021.

The third and fourth semesters for UG and PG were reviewed with respect to self study portions - 10% of syllabus for UG and 20% of syllabus for PG.

The syllabus for Self learning course for UG and PG were scrutinised. ^{Scrutinised}

The service learning program for UG and PG were discussed.

The strategies for Remedial teaching was discussed.

The action taken report was presented in the Board.

The syllabus of the Diploma Course - Fashion Designing & Garment Construction along with Fashion Designing & Apparel making and Surface Ornamentation & Apparel making offered as Certificate courses were also scrutinised.

The modifications, inclusions & deletions were recorded. The members present for the Board of Studies - Upgradation of syllabus 2020-21 are

EXTERNAL EXPERTS

1. UNIVERSITY NOMINEE

DR. D. VIJAYARANI

ASSOCIATE PROF & HEAD,

DEPT. OF HOME SCIENCE.

VVV College For Women.

VIRUDHUNAGAR

D. Vijayarani
28/2/2020

2. DR. S. KANCHANA - SUBJECT EXPERT 1

PROF & HEAD

DEPT. OF HUMAN DEVT.

TNAU, MADURAI.

S. Kanchana
28/2/2020

3. DR. P. L. SRIDEVI SIVAKAMI - SUBJECT EXPERT-2

ASSOCIATE PROFESSOR

DEPT. OF FOOD SERVICE MANAGEMENT
& DIETETICS.

P. L. Sridevi
28/2/2020

AVINASHILINGAM UNIVERSITY,
COIMBATORE.

4. ALUMNAE

MS. SHIV POORNIMA

ASST. PROFESSOR,

DEPT. OF FOOD & NUTRITION

DR GVN INSTITUTE OF MEDICAL
SCIENCES
TRICHY.

Shiv Poornima

28-02-2020

5. INDUSTRIALIST.

DR. SURESH GOVINDAN.

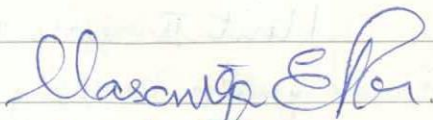
RESEARCH HEAD,

RVN HOSPITALS.

MADURAI.

S. Suresh Govindan
28/2/2020

INTERNALS.

- | | |
|------------------------------------|---|
| 1. DR. VASANTHA ESTHER RANI. |  |
| 2. DR. R. LATHA. | R. Latha |
| 3. DR. S. SANTHI. |  |
| 4. DR. K. KARTHIGA. | K. Karthiga |
| 5. MS. C. HELEN. |  |
| 6. MS. D. MOUNA. | D. Mouna |
| 7. MS. C. PRIMALATHA. | C. Primalatha |
| 8. MS. J. JOSEPHINE JESINTHA. | J. Josephine Jesintha |
| 9. MS. C. BHUVANESWARI. | C. Bhuvaneshwari |
| 10. MS. A. MABEL ESTHER PARIPURAM. | A. Mabel Esther Paripura |
| 11. MS. R. DHIVYA. |  |

DEAN OF SCIENCE - DR. N. MACATHY

The suggestions given by the Board for the academic year 2019-2020, held on 02.03.2019, were carried out appropriately.

In the third semester, the major core paper Extension Education & Communications 19N3CC7 was slightly modified by

- including Program Planning in Unit I.
- e-communication methods was included in Unit V, under Audio-visual aids.

In the allied option paper Catering & Hotel Management 19N3AC1, the title of Unit III was changed to "Reservation and Reception".

- The front office component from Unit I has been shifted to Unit II.

- The Reservation, Reception components of Unit II has been shifted to Unit III.

In Semester IV, the major core paper - Basis of Biotechnology 19N4CC10, Unit I was modified as follows

- title renamed as Biotechnological approaches in food processing.

- Basis of Microbiology - classification of microorganisms Bacteria, Yeast & Mold were added.

Unit II was titled as Spoilage, Contamination & preservation of food.

- In Clothing and Fashion lab - 19N4CC12, inclusion of blouse construction was suggested.

The rest of the papers offered in Semester III & IV - Fiber to Fabric - 19N3CC8, lab in Basics of Clothing 19N3CC9, Clothing & Fashion - 19N4CC11 were found to be satisfactory.

In PG - Human Nutrition & Nutraceuticals, the III & IV semester papers were reviewed and the following suggestions were made.

- In major core 19PG3N12 - Functional Foods & Nutraceuticals in Preventive Dietetics Units I, II & V were modified by deleting the physiological aspects - as a paper exclusively on Applied Physiology. 19PGIN3 has been introduced in the first semester.

- In Unit V - reproductive health has been included.

- In the paper 'Community Nutrition' - 19PG3N13, 'Health Indicators' has been included in Unit IV.

- In the core paper 19PG3N14 - Analytical Instrumentation, 'ICP - Induction Coupled Plasma Spectrophotometry' was included in Unit IV.

- In the lab in Techniques of Experimental Nutrition 19PG3N16, Estimation of acid value in fruits & vegetables has been included.

- In the Core paper 19PG4N18 - Food Microbiology, Unit II was renamed as Food borne infections,

Unit III as Contamination, Spoilage & preventive measures and Unit IV as Food borne Intoxication.

The other major & elective papers - Nutrition in Clinical Care & Disaster, Nutritional Biochemistry, Advanced Food Science & Processing Techniques, Food safety & Quality Control and Institutional Management & Food Product Development were found to be satisfactory.

The add on credit - Computer application - SPSS syllabus was shown to the Board and approved.

The Diploma course Fashion Designing & Garment Construction was reviewed and found balanced. The value added certificate

courses (60 hours) i) Fashion Designing & Apparel making 19UGVA^{CN1} and ii) Surface Ornamentation & Apparel making 19UGVACN2. was scrutinised and to be satisfactory.

- The Self Learning papers - 'Nutrition for Health & Fitness' for UG and 'Sports Nutrition' for PG were framed and approved by the Board.

- The self study component was highlighted in each course and found appropriate by the subject experts of the Board.

- The MOOC online courses taken up by the UG and PG students were discussed.

- The External examiners and subject experts for all lab exams & project VIVA for UG, PG and FDGC were reviewed.

- The industries (Food & Textiles) and hospitals for industrial and dietetic internships were discussed with the Board members.

- Service Learning program for UG - Extension - 'Outreach Program' and 'Community Nutrition Field Work' for PG were discussed in the meeting.

Finally, the feedback about the UG and PG program was collected. The Board members recorded their remarks and suggestions for change on the individual course papers offered for the UG, PG and FDGC courses.

The members for the upgradation of the syllabus 2020-21 of the Research Centre of Home Science appreciated the framework of the syllabus with reference to self study component. Constructive suggestions by the Board elicited appropriate modifications in the respective major, allied & elective papers of the UG, PG and Diploma Course offered by the Research Centre of Home Science.

1. DR. D. VIJAYARANI.
UNIVERSITY NOMINEE

D. Vijayarani
28/2/2020

2. DR. S. KANCHANA
SUBJECT EXPERT - I.

S. Kanchana
28/2/2020

3. DR. P.L. SRIDEVI SIVAKAMI.
SUBJECT EXPERT - II.

P.L. Sridevi Sivakami
28/2/2020

4. MS. SHIV POORNIMA.
ALUMNAE

Shiv Poornima
28-02-2020

5. DR. SURESH GOVINDAN
INDUSTRIALIST

S. Suresh Govindan
28/2/2020

6. DR. VASANTHA ESTHER RAO

V. Vasantha Esther Rao

7. DR. R. LATHA

R. Latha

8. DR. S. SANTHI.

S. Santhi

9. DR. K. KARTHIGA

K. Karthiga

10. MRS. C. HELEN

C. Helen

11. MRS. D. MOVNA

D. Movna

12. MRS. C. PRIYALATHA

C. Priyalatha

13. MRS. J. JOSEPHINE JESINTHA

J. Josephine Jesintha

14. MS. C. BHUVANESWARI

C. Bhuvaneshwari
28.02.2020

15. MS. A. MABEL ESTHER PARIPURNA

A. Mabel Esther Paripurna
28.2.20.

16. MS. DHINYA .R

Dhinya R
28.02.2020

17. DR. N. MALATHY
(DEAN OF SCIENCE.)

N. Malathy

Action taken report of 2019-2020

Suggestions by Board

Action taken

1. In PNICCI - Human Development factors affecting prenatal development, babyhood and habit formation - need to be mentioned

The subheadings were included in the syllabus of 2019-2020.

2. In PN2CC6, Food Science's Nutrition lab, Experimental Cookery was to be mentioned.

Experimental cookery was mentioned in the syllabus of 2019-20.

3. In The Family Resource Mangement now titled as Housing's Art in Home NECC15, Savings, houseplan and landscaping were suggested, to be added.

As suggested, the subheadings were added on to Unit I and Unit III of the syllabus of 2019-20.

4. In 19PG2NY, Functional Foods $\frac{3}{4}$ Nutraceuticals, Bacopa monnieri were suggested to be included.

The suggested herb was included in Unit V.

5. In 19PG2N10, extraction of Bacosides using TLC was suggested

The experiment was added as a demonstration experiment.

28/02/2020



FATIMA COLLEGE (AUTONOMOUS), MADURAI-18
RESEARCH CENTRE OF HOME SCIENCE-
HUMAN NUTRITION AND NUTRACEUTICALS
For those who joined in June 2019 onwards

PROGRAMME CODE: PSNN

COURSE CODE	COURSE TITLE	HRS / WK	CREDIT	CIA Mks	ESE Mks	TOT. MKs
SEMESTER - I						
19PG1N1	Advanced Human Nutrition	6	4	40	60	100
19PG1N2	Advanced Dietetics	6	4	40	60	100
19PG1N3	Applied Physiology	6	4	40	60	100
19PG1N4	Advanced Dietetics Lab	4	2	40	60	100
19PG1N5	Clinical Laboratory Techniques Lab	4	2	40	60	100
19PGNEDC1	EDC-Nutrition & Dietetics	3	3	40	60	100
	Library	1	-	-	-	-
Total		30	19			
SEMESTER - II						
19PG2N6	Clinical Nutrition & Diet Therapy	6	4	40	60	100
19PG2N7	Functional Foods & Nutraceuticals	6	4	40	60	100
19PG2N8	Research Methodology	6	4	40	60	100
19PG2N9	Clinical Nutrition & Diet Therapy Lab	4	2	40	60	100

19PG2N10	Functional Foods & Nutraceuticals Lab	4	2	40	60	100
19PGNEDC2	EDC-Nutrition & Dietetics	3	3	40	60	100
	Library	1		-	-	-
Total		30	19			
SEMESTER - III						
19PG3SIN1	Summer Internship	-	3	50	50	100
19PG3N11	Functional Foods & Nutraceuticals in Preventive Dietetics	6	5	40	60	100
19PG3N12	Community Nutrition	6	5	40	60	100
19PG3N13	Analytical Instrumentation	6	5	40	60	100
19PG3NE1/ 19PG3NE2	Food Product Development and Evaluation/ Institutional Management	4	4	40	60	100
19PG3N14	Community Nutrition Lab	4	2	40	60	100
19PG3N15	Techniques for Experimental Nutrition Lab	4	2	40	60	100
Total		30	26			
SEMESTER - IV						
19PG4N16	Food Microbiology	6	5	40	60	100
19PG4N17	Nutritional Biochemistry	6	5	40	60	100
19PG4N18	Advanced Food Science and Processing Techniques	6	5	40	60	100
19PG4NE3/ 19PG4NE4	Food Safety and Quality Control/ Nutrition in Critical Care and Disasters	4	4	40	60	100
19PG4N19	Food Microbiology Lab	4	2	40	60	100
19PG4N20	Nutrient Analysis Lab	4	2	40	60	100

19PG4N21	Project*& Viva Voce		3	50	50	100
Total		30	26			
	Total	120	90			

OFF-CLASS PROGRAMME

ADD-ON COURSES

Course Code	Courses	Hrs.	Credits	Semester in which the course is offered	CIA Mks	ES E Mks	Total Marks
	SOFT SKILLS	40	4	I	40	60	100
	COMPUTER APPLICATIONS SPSS	40	4	II	40	60	100
	MOOC COURSES (Department Specific Courses/any other courses) * Students can opt other than the listed course from UGC-SWAYAM /UGC /CEC	-	Minimum 2 Credits	-	-	-	
	COMPREHENSIVE VIVA (Question bank to be prepared for all the papers by the respective course teachers)	-	2	IV	-	-	100

	READING CULTURE	15/ Semester	1	I-IV	-	-	-
	TOTAL		13 +				

EXTRA CREDIT COURSE

Course Code	Courses	Hrs.	Credits	Semester in which the course is offered	CIA Mks	ESE Mks	Total Marks
19PGSLN1	Sports Nutrition (Offered for II PG)	-	2	III & IV	40	60	100

- **Lab Courses :**

- A range of 10-15 experiments per semester

- **Summer Internship:**

- Duration-1 month (2nd Week of May to 2nd week of June-before college reopens)

- **Project:**

- Off class
- Evaluation components-Report writing + Viva Voce (Internal marks-50) + External marks 50

- **EDC:**

Syllabus should be offered for two different batches of students from other than the parent department in Sem-I & Sem-II

II M.Sc.
SEMESTER –III & IV

For those who joined in 2019 onwards

PROGRAMM E CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/ WEE K	CREDIT S
PSNN	19PGSLN 1	SPORTS NUTRITION	Self Learning	-	2

COURSE DESCRIPTION

The course explains the medical nutrition therapy for sports personnel, common diseases, and special conditions like sports related disease conditions.

COURSE OBJECTIVES

- To identify and describe the nutritional needs of normal & sports personnel.
- To identify and describe various sports related disease conditions.
- To gain knowledge on appropriate medical nutritional therapy for sports injury, sports anaemia, dehydration, gut disorders & allergies.
- To develop the attitude and capacity for taking up sport nutrition counselling as a profession.

Units

Unit-I Introduction to Health & Exercise: Concept of health, Wellness, Well being . Specific fitness and health status. Physical Activities & Fitness: Concept to Fitness, Exercise -Definition, components of fitness, energy system – aerobic & anaerobic, nutritional demands of sports and dietary recommendations – objectives, nutritional requirements, dietary guidelines-

Unit-II Holistic approach to the management of fitness and health: Energy input and output. Diet and Exercise Effect of specific nutrients on work

performance and physical fitness. Nutrition, exercise, Physical fitness and health – inter-relationship.

Unit III Nutrition in Sports: Sports specific requirement, Diet manipulation - Pre-game and post game meals. Assessment of different nutrigenic aids and commercial supplements. Diets for persons with high energy requirements, stress, fracture and injury.

Unit IV Medical nutrition therapy (MNT):MNT for athletes with Nutrition related disorders; Diabetes and Cardiovascular disease: Physiological effect of exercise; Physical activity. Effects of long-term physical activity; Acute effects of exercise; Dietary guidelines and Nutrient timing; type of carbohydrate and timing; Pre and post event carbohydrate loading and fluids; Osteoporosis: Causes and consequences; Physiological effects of exercise; Sports Anaemia: Causes and consequences; .Physiological effects of exercise

Unit V Sports Nutritional Therapy for Gut disorders: Athletes with gastrointestinal disorders: food allergies and food intolerance; GI disturbance; Excessive flatulence; Abdominal distention; Intermittent diarrhoea; Constipation; Food related adverse reactions (FRAR). Fluid intake- Water and electrolyte balance, losses and their replenishments during exercise and sports events, dehydration and its effects.

References:

1. "Fitness and Wellness" : Warner W. K Hoeger and Sharvon A. Hoeger.
2. "Fitness & Wellness concepts": Charles B. Corbina & Ruth Lindsey.
3. "Lifetime Fitness & Wellness - A personal choice": Melvin H. Williams
4. Oxford Textbook of Public Health, Helen Liepman. • Sunderlal, Aadarsh, Pankaj, 2007.
5. Textbook of Community Medicine, CBS Publishers & Distributors. • Kirch, Wilhelm, 2008.
6. Encyclopedia of Public Health, Volume 1 & 2, Kluwer Academic Publishers.
7. Mary -Jane Schneider and Henrey Schneider, 2006 (2nd edition), Introduction to Public Health, Jones and Bartlett Publishers.

8. [Kathleen Mahan. L.](#) Sylvia Escott-Stump, Janice L Raymond & Krause (2011) .*Food & Nutrition Therapy*, (13th ed), Elsevier Publications.

9. Robinson CH.(1994) . *Normal & Therapeutic Nutrition* XVIII Edition, Macmillan Publishers Company, New York.

10. Srilakshmi.B (1995). *Dietetics*, New Age International Private Ltd., New Delhi.

11. Sue Rodwell Williams. (2001). *Basic Nutrition and Diet therapy*, Mosby publications.

JOURNAL REFERENCES:

1. Food and Nutrition Bulletin United Nations University Press, Japan.
2. Journal of American Dietetic Association, The American Dietetic Association, Mount Marris, Illinois, 61054, USA.
3. Nutrition Abstracts and Reviews, CBB International, UK.
4. Nutrition Reviews, Nutrition Foundation, Washington, DC..
5. The Indian Journal of Medical Research, The Indian Council of Medical Research, New Delhi.

WEB REFERENCES:

1. www.faseb.org/asns
2. www.nutritionfoundation.org
3. www.lifelines.com/ntnlkn.html
4. www.diabetes.org
5. www.americanheart.org
6. www.cancer.org
7. www.pugmarks.com/aims
8. www.eatright.org/
9. www.sea&airtravelnutrition.org

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
5	10	15	5	5	40	60	100

C1 – Average of Two Session Wise Tests

C2 – Sum of Two Monthly Tests

C3 - Mid Sem Test

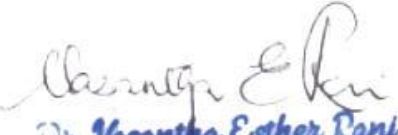
C4 – Best of Two Weekly Tests

C5 – Non - Scholastic

COURSE OUTCOMES

On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1		K2	
CO 2		K2	
CO 3		K2	
CO 4		K2	
CO 5		K2	


Dr. Vasantha Esther Rani
Associate Professor & Head
The Research Centre of Home Science
Fatima College (Autonomous)
Madurai - 625 019