

SREE BALAJI COLLEGE OF NURSING DEPARTMENT OF COMMUNITY HEALTH NURSING VALUE ADDED COURSE CERTIFICATE COURSE ON FOOD PRESERVATION

NUTRITION DEPARTMENT CERTIFICATE COURSE OF FOOD PRESERVATION

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REQUISITION LETTER

From

Department of Nutrition,

Sree Balaji College of nursing,

Chrompet, Chennai-600 044

To

Dr.V.Hemavathy,

The Principal,

Sree Balaji College of nursing,

Chrompet.Chennai-600044.

Respected Madam

This is for your kind perusal that we, Nutrition department are planning to conduct a value added course on Short Term Course On **Food Preservation** from 13/01/2020 to30/01/2020, s for a period of three Weeks. We kindly request you to grant us permission to conduct this programme and do the needful.

Thanking you.

Warm Regards

Department of Nutrition

DEPARTMENT OF NUTRITION Sree Balaii College of Nursing No.7, C.L.C Works Read. Chrompet, Chennal - 500 0442

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From

Mrs. D. Anitha

Professor and Head,

Nutrition Department,

SreeBalaji College of Nursing,

To

The Dean,

SreeBalaji College of Nursing,

Bharath Institute of Higher Education and Research,

Chennai.

Sub: Permission to conduct value-added course: Food Preservation

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled: Food Preservation 13/01/2020- 30/01/2020. We solicit your kind permission for the same.

Kind Regards

DEPARTMENT OF NUTRITION Sree Balaji College of Nursing No.7, C.L.C Works Road, Chrompet, Chennai - 600 044.

Mrs.D.Anitha









SREE BALAJI COLLEGE OF NURSING

(Recognised By Indian Nursing Council, New Delhi and The Tamilnadu Nurses and Midwives Council) (Approved by Govt. of Tamil Nadu and Affiliated to Bharath Institute of Higher Education and Research)

No.7, Works Road, Chromepet, Chennai - 600 044. Date: 30/12/2019

CIRCULAR

Notification for Value added courses offered by college of Nursing

The Department of Nutrition, college of Nursing, is scheduled to offer a Value added Course on Food Preservation from 13/01/2020- 30/01/2020 for a period of 3 weeks. Interested students can approach Mrs. R.S. Diana, Professor and Course Coordinator, Department of Nutrition for registration and for further details on or before 02.01.2020.

Principal

Course Coordinator

Dr. V. HEMAVATHY, M.Sc.(N),M.A.,M.Phil.,Ph.D.(N), PRINCIPAL SREE BALAJI COLLEGE OF NURSING No. 7, Works Road, Chromepet,

Chennai-600 044.

Copy to:

Vice Chancellor

Pro Vice Chancellor

Additional Registrar

Deans

COE

Principal

Heads of Departments

HOD

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DEPARTMENT OF NUTRITION Sree Balaji College of Nursing No.7, C.L.C Works Road,

Chrompet, Chennal - 600 044.

COLLEGE OF NURSING

DEPARTMENT OF NUTRITION

VALUE ADDED COURSE ON FOOD PRESERVATION

2019-2020

COURSE CO-ORDINATOR DETAILS

Faculty Name: Mrs. R.S. DIANA, Professor, Department of Nutrition

Email ID: dianarsbd@gmail.com

Mobile number: 9940193778

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH SREE BALAJI COLLEGE OF NURSING

SYLLABUS

NAME OF THE COURSE: Food Preservation

COURSE HOURS: 30HOURS

OBJECTIVES:

- 1. Developing an understanding about the processing and preservation techniques.
- 2. Explain Biochemical changes caused by microorganisms, deterioration and spoilage of various types of food products.
- 3. Explain Contaminants Of Foods-Stuffs and identify Microbial Spoilage Of Foods, food infection and intoxication
- 4. Describes the Anaytical Techniques involved in Microbiology and develops analytic techniques skills in students for the detection of pathogens.
- 5. Describes the process of Fermentation of foods and explains the scope of Food Chemistry and Nutrition.
- 6. Explains the Natural Pigments processing properties and industrial applications and to identify the Enzymes used in Food Industry.

Module I -MICROBIOLOGY OF FOOD

History Of Microbiology Of Food Types of micro-organism associated with food-mold, yeast, and bacteria, Microbial growth pattern, physical and chemical factors influencing destruction-microorganisms. Microorganisms In Natural Food Products And Control: Biochemical changes—Physical, chemical and microbiological Texture deformations—slime, ropiness, curdling, discoloration etc.; Toxin production—endotoxins and exotoxins).

MODULE II -CONTAMINANTS OF FOOD STUFFS

Contaminants Of Foods-Stuffs: Fruits, vegetables, cereals, pulses, oilseeds, milk and meat during handling and processing. Food Borne pathogens, food poisoning, Examples: E. coli ,Salmonella, Campylobacter jejuni, Bacillus cereus, Shigella sp., Clostridium sp, Staphylococi.

Module III-PRESERVATION OF FOOD AND ANALYTICAL TECHNIQUES IN MICROBIOLOGY

Preservation by low-temperature, heat ,drying, chemical, nonthermal methods and irradiation. Screening and Enumeration of spoilage microorganisms. Rapid detection technique for microorganisms – Total ATP measurement, PCR based, Biosensor based, Immunological Bacteriophage based markers etc.

MODULE IV – FOOD FERMENTATION

Traditional fermented foods of India and other Asian countries; Probiotics and prebiotics; Fermented foods based on milk, meat and vegetables; Water in food, water activity and shelf life of food Carbohydrates- functional properties of sugars and polysaccharides in foods chemical make-up, properties, nutritional and industrial importance.

MODULE V - NUTRITIONAL ASPECTS OF PROTEINS, LIPIDS AND VITAMINS

Amino acids, essential amino acids, biological value, PER and industrial importance. Lipids: classification and use of lipids in foods, essential fatty acids, Polyunsaturated Fatty Acid hydrogenation, rancidity ,Vitamin and Mineral. Effect of processing and storage of Vitamins. Principles of microbial assay of B group Vitamins.

MODULE VI- NATURAL PIGMENTS AND ENZYMES USED IN FOOD INDUSTRY

Natural pigments, their occurrence and characteristic properties, their changes during processing and storage, industrial applications. Enzymes used in food industry: Definition, importance, sources, nomenclature, classification and their applications in food processing.

REFERENCE

- 1. William. C. Frazier ,Dennis .C. Westhoff; Food Microbiology ,MC. Graw-Publishing Company;4th edition, Page 171-310.
- 2.M. Shafiur Rahman ,"Handbook of Food Preservation" Technology & Engineering, CRC Press, 16-Jul-2007,2nd edition PAGE:546-876 .
- 3. The Gardeners and Farmers CENTRE Terre Vivante, Deborah Madison, Eliot Coleman "Preserving Food without Freezing or Canning": Traditional Techniques Using Salt, Oil, Sugar, Alcohol, Vinegar, Drying, Cold Storage, and Lactic Fermentation, Publisher Chelsea Green Publishing Co17 Jun 2013, Page: 125-214.

Course Curriculum/Topics with schedule (Min of 30 hours)

S.NO	DATE	TOPIC	NAME	TIME	HOURS
1.	13.1.2020	History Of Microbiology Of Food Types of microorganism associated with food- mold, yeast, and bacteria, Microbial growth pattern, physical and chemical factors influencing destruction-	Dr. S. Uma Gowri M.Sc., M.Phil. Ph .D, Associate Professor, Ethiraj College for Women	9.00A.M- 1.00 P.M 2.00 P.M- 3.00P.M	5
2.	18.1.2020	microorganisms. Microorganisms In Natural Food Products And Control: Biochemical changes— Physical, chemical and microbiological Texture deformations—slime, ropiness, curdling, discoloration etc.; Toxin production—endotoxins and exotoxins).	Dr J Joselin M.Sc., M. Phil., Ph.D. Assistant Professor, WCC College for Women	9.00 A.M- 12.00 P.M 2.00P.M- 3.00P.M	4
3.	20.1.2020	Contaminants Of Foods- Stuffs: Fruits, vegetables, cereals, pulses, oilseeds, milk and meat during handling and processing. Food Borne pathogens, food poisoning,Examples: E. coli ,Salmonella, Campylobacter jejuni, Bacillus cereus, Shigella sp., Clostridium sp,Staphylococi.	Dr. N. Anbumani , M.D, P. h d , Professor Microbiology Department SRMC	9.00A.M- 12.00P.M	4
4.	22.1.2020	Preservation by low-temperature, heat ,drying, chemical, nonthermal methods and irradiation. Screening and Enumeration of spoilage microorganisms. Rapid detection technique for microorganisms – Total ATP measurement, PCR based, Biosensor based, Immunological Bacteriophage based markers etc.	Mrs. N. Sowmya, M. Sc., M. Phil., Assistant Professor, Quaid-E-Millath Government College for Women	9.00A.M- 12.00P.M 2.00 P.M- 3.00 P.M	4

5.	24.1.2020	Traditional fermented foods of India and other Asian countries; Probiotics and prebiotics; Fermented foods based on milk, meat and vegetables; Water in food, water activity and shelf life of food Carbohydratesfunctional properties of sugars and polysaccharides in foods chemical make-up, properties, nutritional and industrial importance.	Dr. GeethaSwaminathan M.Sc., M.Phil., Ph. D, Associate Professor, Food Processing and Quality Control Department, Stella Maris College	9.00A.M- 1.00P.M	4
6.	27.1.2020	Amino acids, essential amino acids, biological value, PER and industrial importance, Lipids: classification and use of lipids in foods, essential fatty acids, Polyunsaturated Fatty Acid hydrogenation, rancidity, Vitamin and Mineral. Effect of processing and storage of Vitamins. Principles of microbial assay of B group Vitamins.	Dr. A.J. Hemamalini, M.sc, P. h d, Professor and Head, Clinical Nutrition Department, SRMC	9.00A.M- 1.00P.M 2.00 P.M- 3.00P.M	5
7.	30.1.2020	Natural pigments, their occurrence and characteristic properties, their changes during processing and storage, industrial applications. Enzymes used in food industry: Definition, importance, sources, nomenclature, classification and their applications in food processing.	Dr. Mrs. N. Malathy M.sc, M.Phil. ,Ph. D, Assistant Professor & HOD Quaid-E-Millath Government College for Women	9.00A.M- 1.00P.M	4

SREE BALAJI COLLEGE OF NURSING

S.No Reg. No		Name Of The Candidate			
1	U19NR037	KAMESH. R			
2	U19NR038	KAVITHA. M			
3	U19NR039	KAVIYA. T			
4	U19NR040	KIRUBALAKSHMI .P			
5	U19NR041	KISHORE . S			
6	U19NR042	LAVANYA. P			
7	U19NR043	MOHAMMED RAIYAN . M. R			
8	U19NR044	MOHANA PRIYA . S			
9	U19NR045	MOHANAPRIYA .R			
10	U19NR046	MONISHA . R			
11	U19NR047	NARESH KUMAR . V			
12	U19NR048	NITHISHA RAJESH			
13	U19NR049	PARAMESWARI.S .L			
14	U19NR050	POORNIMA R			
15	U19NR051	PRIYA . P			
16	U19NR052	RAGAVENTHIRAN . S			
17	U19NR053	RAJESWARI . L			
18	U19NR054	REEBA MOL . P			
19	U19NR055	RITU BHATT. G			
20 U19NR056 SAMUKTHA . V		SAMUKTHA . V			
21	U19NR057	SANDHIYA .K			
22	U19NR058	SANDHIYA . R			
23	U19NR059	SARANYA . R			
24 U19NR060 SATHYANARA		SATHYANARAYANAN . K. E			
25	U19NR061	SHANE WILSON			
26	U19NR062	SHERLEE CHELSIYA . M			
27	U19NR063	SHYAMALA KUMARI . A			
28	U19NR064	SNEHA PRADEEP. P			
29	U19NR065	SUGANTHI . S			
30	U19NR066	SULTHAN . S			
31	U19NR067	067 SWETHA. S			
32	U19NR068	THOPIYA BLESSCY . R			
33	U19NR069	VIDHYA . E			
34	U19NR070	VIJAIAMRUTULA M. A			

35	U19NR071	VINITHA . K
36	U19NR072	YUVASHREE .R

MICROBIAL SPOILAGE OF FOODS-FOOD BORNE PATHOGENS



TRADITIONAL FERMENTED FOODS OF INDIA AND OTHER ASIAN COUNTRIES



36 students has participated in the value added courses on Food Preservation organized by

Nutritio n departm ent on 13.01.2







COLLEGE OF NURSING VALUE ADDED COURSE ON FOOD PRESERVATION

Certificate of Appreciation

is is to Certify that Mr/Ms. **MOHANA PRIYA**. **R** (U19NR045)B. Sc(N) I Year, has Attended Veeks Value Added Course On Food Preservation Conducted By Department Of Nutrition At Sree College Of Nursing, Chennai (TN), during13/01/2020-30/01/2020.

COORDINATOR

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HOD

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DEPARTMENT OF NUTRITION Sree Balaji College of Nursing No.7, C.L.G Works Road, Chrompet, Chennal - 600 044. PRINCIPAL

Dr. V. HEMAVATHY, M.Sc.(N),M.A.,M.Phil.,Ph.D.(N), PRINCIPAL SREE BALAJI COLLEGE OF NURSING No. 7, Works Road, Chromepet,

Chennai-600 044.

SREE BALAJI COLLEGE OF NURSING

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES DEPARTMENT OF NUTRITION

Academic year:

2019-2020

Name of the value added course offered: Food Science & Technology

Period of Batch: 0201 2020 - 20101 2020

Course - Coordinator: D. Aoilha

STUDENT FEEDBACK

Dear Student.

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating					
		Excellent	Very good	Good	Fair	Satisfactory	
1	Course content	~			£		
2	Skill development		_				
3	Motivation		~				
4	Regularity and punctuality of teacher						
5	Coverage of syllabus		_				
6	Resource person interaction with students						
7	Individual attention			1			
8	Outcome	/		71			
9	Competency of the course		/				
10	Other suggestions						

Course co-cordinator

Signature of the student

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