

HOOGLY WOMEN'S COLLEGE

DEPARTMENT OF NUTRITION

Programme outcomes and Course outcomes for the academic year 2018-2019

B.Sc Honours in Nutrition (under CBCS Curriculum of The University of Burdwan)

PROGRAMME OUTCOME

PO-1: The course is an interdisciplinary programme with knowledge of human anatomy, microbiology, biochemistry and their role in relation to food and health.

PO-2: Students completing the program of BSc in Food and Nutrition will have adequate knowledge of Nutrition, Nutrients and the different scientific processes involved in the utilization of various food and nutrient components. The programme provides basic understanding of the correlation between food and health.

PO-3: The programme provides in-depth understanding of the role of food under specific diseased conditions.

PO-4: Students would have had multiple opportunities to learn the skills necessary for applying theoretical knowledge to practical life and enhance their soft skills and employability quotient.

PROGRAMME SPECIFIC OUTCOMES

PSO-1: The programme helps to understand the role of nutrition at various stages of life.

PSO-2: The programme helps to understand about nutrition and its implications under different diseased conditions.

PSO-3: The course shows how nutrition is important as an integral part in the development of a community and how nowadays Nutrition and lifestyle changes towards a better future society.

PSO-4: The course helps to understand the microbiology of food and how it affects the storage of food items.

PSO-5: Outcome of the course also include better understanding of the biotechnological and genetic approach in food industries.

COURSE OUTCOMES

SL NO.	NAME OF THE COURSE	COURSE CODE	COURSE OUTCOMES
1	NUTRITIONAL PHYSIOLOGY-I	CC-1	CO-1: Learn the anatomical structures and physiology of different systems of human body CO-2: Gain knowledge on the anatomical structures and functions of various components of the human body system
	Practical		CO-1: Learn the different haematological experiments
2	NUTRITIONAL ASPECT OF FOOD ITEMS	CC-2	CO-1: Gain knowledge on the relationship of food, nutrition and health CO-2: Understand the basic concepts behind food science and different food processing CO-3: Gain an in-depth understanding on cooking
	Practical		CO-1: Apply scientific knowledge in making food products CO-2: Develop a knowledge by preparing food in one portion size
3	NUTRITIONAL PHYSIOLOGY-II	CC-3	CO-1: Learn how the human body maintain the homeostasis CO-2: Understand the anatomical structures and functions of a human body under normal conditions.
	Practical		CO-1: Learn about some specific pathological experiments of human body CO-2: Know the characteristics of different histological slides of human body
4	PHYSIOLOGICAL ASPECT OF NUTRITION	CC-4	CO-1: Understand the properties of various micro and macro food components. CO-2: Learn about the basic of nutrition and diet.
	Practical		CO-1: Apply the knowledge of diet planning in community. CO-2: Assess the nutritional status. CO-3: Understand the deficiencies in-

			depth.
5	NUTRITIONAL BIOCHEMISTRY	CC-5	<p>CO-1: Learn about the building blocks of food.</p> <p>CO-2: Understand the metabolism of major food components.</p> <p>CO-3: Comprehend the Biochemical implications of foods components.</p>
	Practical		<p>CO-1: Utilize the laboratory techniques common to basic and applied food chemistry.</p> <p>CO-2: Analyze the principles behind the analytical technique of food products when presented with a practical problem.</p> <p>CO-3: Evaluate the chemical properties and reactions of various food components.</p>
6	NUTRITION : LIFE CYCLE APPROACH	CC-6	<p>CO-1: Understand the importance of nutrition in various stages of life.</p> <p>CO-2: Evaluate the nutritional status through the lifecycle.</p> <p>CO-3: Efficiently assess deficiencies.</p>
	Practical		<p>CO-1: Plan a balanced menu through various stages of life.</p> <p>CO-2: Assess the nutritional status.</p>
7	DIET THERAPY-I	CC-7	<p>CO-1: Understand the implication of diet under diseased conditions.</p> <p>CO-2: Prescribe individualized diets.</p> <p>CO-3: In-depth knowledge on hospital diets.</p> <p>CO-4: understand the correlation between diet and diseases.</p>
	Practical		<p>CO-1: Plan a diet chart under normal conditions.</p> <p>CO-2: Plan a balanced menu for diseased conditions.</p>
8	NUTRITIONAL ASSESSMENT AND NUTRITION PROGRAMME	CC-8	<p>CO-1: Evaluate the major global issues related to Food and Nutrition board.</p> <p>CO-2: Learn how to educate the community about nutrition and health education.</p> <p>CO-3: Understand different nutrition programme and their implication for the development of the community.</p> <p>CO-4: Generate wellness and healthy lifestyle adoption in community and throughout the country.</p>

	Practical		<p>CO-1: Develop skills to conduct simple nutrition assessments to determine risk for under nutrition and over nutrition.</p> <p>CO-2: In depth knowledge about the ideal body measurements and determination of disease.</p>
9	COMMUNITY NUTRITION AND EPIDEMIOLOGY	CC-9	<p>CO-1: Understand the role of nutrition at community level.</p> <p>CO-2: Learn about disease in global scale</p> <p>CO-3: Learn about managing waste and pollution control.</p> <p>CO-4: Evaluation of drinking water.</p>
	Practical		<p>CO-1: Evaluation of microbiology of water.</p> <p>CO-2: Assessment of disease state of the population living in different corner of the community.</p>
10	DIET THERAPY- II	CC-10	<p>CO-1: Understand diet under hospital conditions.</p> <p>CO-2: Understand the correlation between diet and diseases.</p>
	Practical		<p>CO-1: Provide adequate nutrition for special conditions.</p> <p>CO-2: Gain depth knowledge about the preparation of diet chart in different diseased condition</p>
11	ENVIRONMENT MANAGEMENT AND PUBLIC HEALTH	SEC-1	<p>CO-1: Gain knowledge about different environmental hazards and their detrimental effect on health</p> <p>CO-2: Understand the importance of climate on public health</p> <p>CO-3: Gain idea about different types of health hazards</p>
12	IMMUNOLOGY, TOXICOLOGY AND PUBLIC HEALTH	SEC-2	<p>CO-1: Understand the basic of immune system of human body.</p> <p>CO-2: Learn about different toxic agents.</p> <p>CO-3: In depth knowledge about toxic effects in human body and their control.</p>

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	Practical		<p>CO-1: Plan a balanced menu through various stages of life.</p> <p>CO-2: Assess the nutritional status.</p>
7	DIET THERAPY-I	CC-7	<p>CO-1: Understand the implication of diet under diseased conditions.</p> <p>CO-2: Prescribe individualized diets.</p> <p>CO-3: In-depth knowledge on hospital diets.</p> <p>CO-4: understand the correlation between diet and diseases.</p>
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11	FOOD MICROBIOLOGY AND FOOD BORNE DISEASE	CC-11	<p>CO-1: Understand the interaction between microorganisms and food.</p> <p>CO-2: Explain the significance of microorganisms in food</p> <p>CO-3: Describe the disease characteristics of food borne and water borne microorganisms.</p>
	Practical		<p>CO-1: Learn basic laboratory process of microbiology.</p> <p>CO-2: Knowledge about the basic reactions of microorganisms.</p> <p>CO-3: Differentiate various microorganisms.</p>
12	MEDICAL MICROBIOLOGY AND PATHOLOGY	CC-12	<p>CO-1: Learn about pathogenic bacteria and viruses and diseases caused by them.</p> <p>CO-2: Knowledge about natural micro flora of human body.</p>
	Practical		<p>CO-1: Assessment of microorganisms in spoiled food and water.</p> <p>CO-2: Evaluate the antibiotic properties</p>

			of microorganisms.
13	NUTRACEUTICAL AND FUNCTIONAL FOOD	CC-13	<p>CO-1: Understand the role of nutraceuticals.</p> <p>CO-2: Explain the significance of foods to provide immunity in human body.</p> <p>CO-3: Gain in-depth knowledge on the relationship between nutrition and food biotechnology.</p>
	Practical		<p>CO-1: Gain better understanding and Formation of article about the significance of foods against different disease condition.</p>
14	FOOD SAFETY AND FOOD STANDARD	CC-14	<p>CO-1: Gain in-depth knowledge on various quality control measures of food products.</p> <p>CO-2: Importance of food specification and food label with reference to various food additives.</p> <p>CO-3: The implications of adulteration of food and the toxic effects of adulteration.</p> <p>CO-4: Gain in-depth knowledge on various food laws.</p>
	Practical		<p>CO-1: Assess the adulterants present in the food samples.</p>
15	THERAPEUTIC NUTRITION AND CRITICAL CARE	DSE-1	<p>CO-1: Provide adequate nutrition for special diseased conditions</p> <p>CO-2: Understand about critical care for patients.</p>
	Practical		<p>CO-1: Understand the working of dietary department.</p> <p>CO-2: Plan diets and counsel patients effectively.</p>
16	MOLECULAR BIOLOGY	DSE-2	<p>CO-1: Understanding about DNA, RNA and nucleic acids.</p> <p>CO-2: In depth knowledge about formation of these important molecules in the body.</p>
	Practical		<p>CO-1: Gain knowledge about the different instruments needed in the research laboratory.</p> <p>CO-2: Basic fundamentals of DNA and RNA.</p>
17	CONCEPT OF RESEARCH AND HEALTH MANAGEMENT	DSE-3	<p>CO-1: : Introduction of different types of research and research activities such as workshop, seminar, conference etc.</p> <p>CO-2: Knowledge about Health care</p>

			system in India and management of it.
	Practical		CO-1: Gain idea about preparation of project report CO-2: Understand the concept of preparing review of literature ,reference CO-3: Gain idea about survey based research work or experimental work
18	FOOD SPOILAGE AND FOOD PRESERVATION	DSE-4	CO-1: Understand the importance of food preservation. CO-2: Educate public on the importance of food preservation. CO-3: In depth knowledge about food spoilage.
	Practical		CO-1: Knowledge about the food sanitation and hygiene by visiting food industries. CO-2: In depth knowledge about different food processing and preservation techniques .
19	ENVIRONMENT MANAGEMENT AND PUBLIC HEALTH	SEC-1	CO-1: Gain knowledge about different environmental hazards and their detrimental effect on health CO-2: Understand the importance of climate on public health CO-3: Gain idea about different types of health hazards
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12	MEDICAL MICROBIOLOGY AND PATHOLOGY	CC-12	<p>CO-1: Learn about pathogenic bacteria and viruses and diseases caused by them.</p> <p>CO-2: Knowledge about natural micro flora of human body.</p>
	Practical		<p>CO-1: Assessment of microorganisms in spoiled food and water.</p> <p>CO-2: Evaluate the antibiotic properties</p>

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13	NUTRACEUTICAL AND FUNCTIONAL FOOD	CC-13	<p>CO-1: Understand the role of nutraceuticals.</p> <p>CO-2: Explain the significance of foods to provide immunity in human body.</p> <p>CO-3: Gain in-depth knowledge on the relationship between nutrition and food biotechnology.</p>
	Practical		<p>CO-1: Gain better understanding and Formation of article about the significance of foods against different disease condition.</p>
14	FOOD SAFETY AND FOOD STANDARD	CC-14	<p>CO-1: Gain in-depth knowledge on various quality control measures of food products.</p> <p>CO-2: Importance of food specification and food label with reference to various food additives.</p> <p>CO-3: The implications of adulteration of food and the toxic effects of adulteration.</p> <p>CO-4: Gain in-depth knowledge on various food laws.</p>
	Practical		<p>CO-1: Assess the adulterants present in the food samples.</p>
15	THERAPEUTIC NUTRITION AND CRITICAL CARE	DSE-1	<p>CO-1: Provide adequate nutrition for special diseased conditions</p> <p>CO-2: Understand about critical care for patients.</p>
	Practical		<p>CO-1: Understand the working of dietary department.</p> <p>CO-2: Plan diets and counsel patients effectively.</p>
16	MOLECULAR BIOLOGY	DSE-2	<p>CO-1: Understanding about DNA, RNA and nucleic acids.</p> <p>CO-2: In depth knowledge about formation of these important molecules in the body.</p>
	Practical		<p>CO-1: Gain knowledge about the different instruments needed in the research laboratory.</p> <p>CO-2: Basic fundamentals of DNA and RNA.</p>
17	CONCEPT OF RESEARCH AND HEALTH MANAGEMENT	DSE-3	<p>CO-1: : Introduction of different types of research and research activities such as workshop, seminar, conference etc.</p> <p>CO-2: Knowledge about Health care</p>

			system in India and management of it.
	Practical		CO-1: Gain idea about preparation of project report CO-2: Understand the concept of preparing review of literature ,reference CO-3: Gain idea about survey based research work or experimental work
18	FOOD SPOILAGE AND FOOD PRESERVATION	DSE-4	CO-1: Understand the importance of food preservation. CO-2: Educate public on the importance of food preservation. CO-3: In depth knowledge about food spoilage.
	Practical		CO-1: Knowledge about the food sanitation and hygiene by visiting food industries. CO-2: In depth knowledge about different food processing and preservation techniques .
19	ENVIRONMENT MANAGEMENT AND PUBLIC HEALTH	SEC-1	CO-1: Gain knowledge about different environmental hazards and their detrimental effect on health CO-2: Understand the importance of climate on public health CO-3: Gain idea about different types of health hazards
20	IMMUNOLOGY, TOXICOLOGY AND PUBLIC HEALTH	SEC-2	CO-1: Understand the basic of immune system of human body. CO-2: Learn about different toxic agents. CO-3: In depth knowledge about toxic effects in human body and their control.

HOOGLY WOMEN'S COLLEGE

DEPARTMENT OF NUTRITION

Programme outcomes and Course outcomes for the academic year 2022-2023

B.Sc Honours in Nutrition (under CBCS Curriculum of The University of Burdwan)

PROGRAMME OUTCOME

PO-1: The course is an interdisciplinary programme with knowledge of human anatomy, microbiology, biochemistry and their role in relation to food and health.

PO-2: Students completing the program of BSc in Food and Nutrition will have adequate knowledge of Nutrition, Nutrients and the different scientific processes involved in the utilization of various food and nutrient components. The programme provides basic understanding of the correlation between food and health.

PO-3: The programme provides in-depth understanding of the role of food under specific diseased conditions.

PO-4: Students would have had multiple opportunities to learn the skills necessary for applying theoretical knowledge to practical life and enhance their soft skills and employability quotient.

PROGRAMME SPECIFIC OUTCOMES

PSO-1: The programme helps to understand the role of nutrition at various stages of life.

PSO-2: The programme helps to understand about nutrition and its implications under different diseased conditions.

PSO-3: The course shows how nutrition is important as an integral part in the development of a community and how nowadays Nutrition and lifestyle changes towards a better future society.

PSO-4: The course helps to understand the microbiology of food and how it affects the storage of food items.

PSO-5: Outcome of the course also include better understanding of the biotechnological and genetic approach in food industries.

COURSE OUTCOMES

SL NO.	NAME OF THE COURSE	COURSE CODE	COURSE OUTCOMES
1	NUTRITIONAL PHYSIOLOGY-I	CC-1	CO-1: Learn the anatomical structures and physiology of different systems of human body CO-2: Gain knowledge on the anatomical structures and functions of various components of the human body system
	Practical		CO-1: Learn the different haematological experiments
2	NUTRITIONAL ASPECT OF FOOD ITEMS	CC-2	CO-1: Gain knowledge on the relationship of food, nutrition and health CO-2: Understand the basic concepts behind food science and different food processing CO-3: Gain an in-depth understanding on cooking
	Practical		CO-1: Apply scientific knowledge in making food products CO-2: Develop a knowledge by preparing food in one portion size
3	NUTRITIONAL PHYSIOLOGY-II	CC-3	CO-1: Learn how the human body maintain the homeostasis CO-2: Understand the anatomical structures and functions of a human body under normal conditions.
	Practical		CO-1: Learn about some specific pathological experiments of human body CO-2: Know the characteristics of different histological slides of human body
4	PHYSIOLOGICAL ASPECT OF NUTRITION	CC-4	CO-1: Understand the properties of various micro and macro food components. CO-2: Learn about the basic of nutrition and diet.
	Practical		CO-1: Apply the knowledge of diet planning in community. CO-2: Assess the nutritional status. CO-3: Understand the deficiencies in-

			depth.
5	NUTRITIONAL BIOCHEMISTRY	CC-5	<p>CO-1: Learn about the building blocks of food.</p> <p>CO-2: Understand the metabolism of major food components.</p> <p>CO-3: Comprehend the Biochemical implications of foods components.</p>
	Practical		<p>CO-1: Utilize the laboratory techniques common to basic and applied food chemistry.</p> <p>CO-2: Analyze the principles behind the analytical technique of food products when presented with a practical problem.</p> <p>CO-3: Evaluate the chemical properties and reactions of various food components.</p>
6	NUTRITION : LIFE CYCLE APPROACH	CC-6	<p>CO-1: Understand the importance of nutrition in various stages of life.</p> <p>CO-2: Evaluate the nutritional status through the lifecycle.</p> <p>CO-3: Efficiently assess deficiencies.</p>
	Practical		<p>CO-1: Plan a balanced menu through various stages of life.</p> <p>CO-2: Assess the nutritional status.</p>
7	DIET THERAPY-I	CC-7	<p>CO-1: Understand the implication of diet under diseased conditions.</p> <p>CO-2: Prescribe individualized diets.</p> <p>CO-3: In-depth knowledge on hospital diets.</p> <p>CO-4: understand the correlation between diet and diseases.</p>
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17	BIostatISTICS AND BIOINFORMATICS	DSE-3	<p>CO-1: Introduction to bioinformatics and statistics in the world of nutrition.</p> <p>CO-2: Knowledge about different storage data bases of genetic formula.</p>

	Practical		CO-1: Knowledge of data interpretation. CO-2: Evaluation of bioinformatics approach for structural identification of protein and other genetic material.
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