

NOAKHALI SCIENCE AND TECHNOLOGY UNIVERSITY

Department of Food Technology and Nutrition Science

Syllabus

For

Masters in Food Safety & Public Health Nutrition

(One year Program)

Published by

Noakhali Science and Technology University

Sonapur, Noakhali-3814, Bangladesh

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Scope of Public Health Nutrition

Public Health Nutrition is an area of concentration emphasizing the application of food and nutrition knowledge, policy, and research to the improvement of the health of populations. Public health nutrition challenges—such as food insecurity, obesity, and diabetes—are largely preventable, yet they continue to pose significant threats to the health of populations. Thereby, Public health professionals apply core competences from epidemiology and social sciences to develop, implement and evaluate evidence-based programmes to improve health and wellbeing. They are also concerned with equity, quality, effectiveness, cost effectiveness and accessibility of health care and will become involved in policy and strategy development, particularly where this impacts on community health and wellbeing. Thus unlike medicine, which focuses on the health of the individual patient, public health focuses on the health of the public in the aggregate. To achieve this broad, challenging goal, public health professionals engage in a wide range of functions involving technology, social sciences, and politics. Public health professionals utilize these functions to anticipate and prevent future problems, identify current problems, identify appropriate strategies to resolve these problems, implement these strategies, and finally, evaluate their effectiveness.

Masters in Public Health Nutrition Degree offered by **Department of Food Technology & Nutrition Science, NSTU** provides students with in-depth training in the research, understanding, and promotion of public health nutrition through individual, community, population, food systems, and policy approaches. After completion of the Program students will be able to build on fundamental principles of epidemiology, biostatistics, community health, and the social determinants of health to help solve some of the most complex public health dilemmas related to nutrition. They can explore challenges including food insecurity, obesity, diabetes and other chronic health conditions, the unmet needs of vulnerable populations, and the public and environmental health impacts of food systems. They will be able to develop an enduring understanding of the social, behavioral, and environmental determinants of health while building core research skills. Students will also learn to design and evaluate nutrition programs and sustainable food systems utilizing multilevel and life course perspectives and a variety of methodological, analytic, and advocacy skills. By the time students complete this MS they will have been exposed to extensive research and training in key public health nutrition topics, including: human nutrition science, epidemiology of diet and chronic disease, population-level nutrition assessment, public health nutrition program planning and evaluation, research methods for community health and food systems and evidence-based foundations of sustainable food systems.

This MS Degree will expose students for a broad range of research-focused careers devoted to public health nutrition in academia, government, and private industry. And Students will be qualified to pursue positions in a wide variety of settings, such as health care, community health, research organizations, development organizations and education.

Scope of Food Safety:

FTNS Dept offers Masters **Degree in Food Safety** which has the following scope in national and international level.

1. Food Scientists

Food Safety knowledge achieved by Food Safety Masters degree going to help students to become Food scientists and who can use several different scientific principles, like chemistry and microbiology, to figure out the safest ways to process foods while making them healthy and tasty. They analyze the nutritional content of foods, such as the levels of vitamins, minerals, fat, sugar, protein and sodium. They also determine the safest and most effective ways to process, package, preserve and distribute food products. Additionally, food scientists ensure additives and preservatives are in compliance with the Food and Drug Administration regulations.

2. Food Inspector/Auditor

Food Safety Inspector or Food Safety Auditor helps the U.S. Department of Agriculture's or other organization's (USDA) Food Safety and Inspection Service branch for maintaining quality assurance on all aspects of meat, poultry and egg manufacturing. USDA food inspectors ensure proper sanitation guidelines in private commercial slaughtering factories and on farms where eggs are produced. They also check that slaughtering practices are done in a way that prevents diseased and contaminated meat and poultry. Import food inspectors check to make sure imported food products meet the same regulations as those produced domestically. And finally for doing these activities food safety knowledge is mandatory which can be achieved by M.S. in Food Safety under the Department of Food Technology and Nutrition in Noakhali Science and Technology University.

3. Food Safety Specialist

Food safety specialists, also referred to as environmental health practitioners, work for private corporations and for government agencies like the Food and Drug Administration and the Centers for Disease Control and Prevention. They ensure sanitary procedures for processing, preparing and packaging food, and inspect equipment.

Food safety specialists also ensure proper storage and distribution procedures, safe crop-growing practices, and correctly labeled foods. Additionally, they inspect food service businesses for sanitary practices. They are also responsible for disseminating information to the public when food-related diseases occur.

Course Information of MS Syllabus

Total Credits: 36 (Year-1, Term-1=16; Year-1, Term-2=20); Duration of Course=1 year

	Course Code	Course Title	Credit
M.S Year-1, Term-1	FTNS-5101	Advanced Human Nutrition	4
	FTNS-5103	Planning and Project Design	4
	FTNS-5105	Food Security, Safety and Control	4
	FTNS-5107	Concepts & Scope of Public Health Nutrition & Health Promotion.	4
Total			16

Thesis Group

	Course Code	Course Title	Credit
M.S Year-1, Term-2	FTNS-5201	Epidemiology and Community Health	4
	FTNS-5203	Food Marketing and Consumer Behavior	4
	FTNS-5202	Thesis	9
	FTNS-5208	Seminar	1
	FTNS-5210	Viva-voce	2
	Total		

Non-Thesis Group

	Course Code	Course Title	Credit
M.S Year-1, Term-2	FTNS-5201	Epidemiology and Community Health	4
	FTNS-5203	Food Marketing and Consumer Behavior	4
	FTNS-5204	Practical (Field and/or Lab based)	8
	FTNS-5206	Oral	1
	FTNS-5208	Seminar	1
	FTNS-5210	Viva-voce	2
	Total		