

No.AC.2(S)/378/2020-21

NOTIFICATION

Sub: Introduction of new certificate program under self-financed at DoS in Food Science & Nutrition from the Academic Year 2020-21.

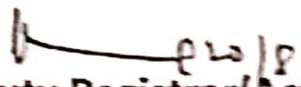
- Ref:** 1. Decision of Board of Studies in Food Science & Nutrition (PG) meeting held on 18.01.2020.
2. Decision of the Faculty of Science & Technology Meeting held on 18.02.2020.
3. Decision of the Academic Council meeting held on 18.06.2020.

The Board of Studies in Food Science & Nutrition (PG) which met on 18.01.2020 has recommended to introduce new self-financed program "Certificate Course in Nutrition and Health" at DoS in Food Science and Nutrition from the Academic Year 2020-21.

The Faculty of Science and Technology and the Academic Council meetings held on 18.02.2020 and 18.06.2020 respectively have approved the above said proposal and the same is hereby notified.

The syllabus of "Certificate Course in Nutrition and Health" of M.Sc. Food Science & Nutrition program is annexed. The contents may be downloaded from the University Website i.e., www.uni-mysore.ac.in.

Draft approved by the Registrar


Deputy Registrar(Academic),
Deputy Registrar (Academic),
University of Mysore
Mysore-570 005

To:

1. The Registrar (Evaluation), University of Mysore, Mysore.
2. The Dean, Faculty of Science & Technology, DOS in Psychology, Manasagangotri, Mysore.
3. The Chairperson, BOS in Food Science & Nutrition, DOS in Food Science & Nutrition, Manasagangotri, Mysore.
4. The Chairperson, Department of Studies in Food Science & Nutrition, Manasagangotri, Mysore.
5. The Director, College Development Council, Moulya Bhavan, Manasagangotri, Mysore.
6. The Deputy/Assistant Registrar/Superintendent, AB and EB, UOM, Mysore.
7. The P.A. to the Vice-Chancellor/Registrar/Registrar (Evaluation), UOM, Mysore.
8. Office file.

Certificate Course in Nutrition & Health (CCNH)

Jointly offered by



ಮೈಸೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ
UNIVERSITY OF MYSORE

2020

CERTIFICATE COURSE IN NUTRITION & HEALTH (CCNH)

PREAMBLE

Nearly 40% of India's children below the age of three years are malnourished (underweight) and nearly 26 million are suffering from 'wasting'. At least half of the Indian infant deaths are related to malnutrition, often associated with infectious diseases. Malnutrition impedes motor, sensory, cognitive and social development, so malnourished children will be less likely to benefit from schooling and will consequently have lower incomes as adults. Another end of the spectrum of malnutrition is that of over-nutrition leading to increased and early onset of non-communicable/chronic illnesses. 14,4 million children are obese in India (second to China with 15.3 million in the world). Population based approaches have been the mainstay of research in the field of nutrition for decades. There is a need for India to move from 'Food Security' to 'Nutrition Security'. This requires workforce to be trained in nutrition and health and ready to take up the daunting task of enhancing knowledge and awareness, improving access to nutrition, lifestyle changes and behaviour change communication among the public.

IIHMR Bangalore has envisaged this certification course to provide direction to nutrition research and practice in the country and with the objective of contributing towards training future leaders in the field of Public Health Nutrition. Personnel working in private and public sector departments need training and capacity building with the latest research-based approaches and develop skills to lead change.

IIHMR Bangalore is offering a certificate course in association with Mysore University on Nutrition and Health (CCNH), is a hybrid program (on-line interactive and contact classes) to selected health care related professionals. Participation in this course, will enable professionals in field to augment their knowledge on Public Health Nutrition and offer better services in the community, they will be benefitted with regular updates on fresh policies, rationales for changes and tips to incorporate such updates into their day to day service delivery and practice.

ELIGIBILITY CRITERIA

Eligibility is a bachelor's degree from a recognized University.

The Certificate Programme is open to:

1. Graduates from life science disciplines including medical graduates, nutrition, paramedical and Nursing.
2. Health Personnel including public health educators/ workers and health assistants.
3. Practitioners in private hospitals, NGOs etc. and Researchers in Nutrition and Health (UG/PG/Ph.D.)
4. Program Managers from Department of - Health/ Food & Civil Supplies/ ICDS/ Women & Child Welfare/ Social Welfare/ Panchayat Raj/ Rural Development, etc

Note: Applicants in service in the above-mentioned categories will be given preference

COURSE OBJECTIVES

- ✚ To increase awareness and understanding about nutrition science relating to the field of health
- ✚ Better understanding of Nutrition and Health inter-dependency
- ✚ Improved capacity on implementing nutritional concepts in day to day practice for effective service delivery
- ✚ Better understanding on use of epidemiological methods in conducting nutritional studies and applications of community approaches to nutrition.
- ✚ Improved capacity on management of special situations like –
 - Malnutrition – Undernutrition & Overnutrition
 - Nutrition in pregnancy, lactation
 - Nutrition in Infancy & Childhood
 - HIV/AIDS TB, etc
- ✚ Conceptualize and understand multisectoral interventions in nutrition and health at all levels- individual, household and community
- ✚ Increased understanding about approaches, methods and skills in nutrition and Health promotion of the masses

COURSE OUTLINE

1. The total duration of the course is six months
2. The course comprises of theory and field-based activity components

Activity Details		
Sl no	Activity	Mode
1	1 st Interactive teaching workshop and classes	On-line
	Submission of Assignment -1 to be uploaded	Submission on-line
	Submission of Assignment -2 to be uploaded	Submission on-line
2	2 nd Interactive Teaching workshop and Project paper Presentation	5 days of Contact Classes

3. Interactive teaching workshop/contact Classes will be conducted on-line. Students can access recorded classes. The exact dates of class schedule, on-line access and place of contact sessions will be put in the University/IIHMR Bangalore website. The themes covered in interactive on-line classes of the programme are:

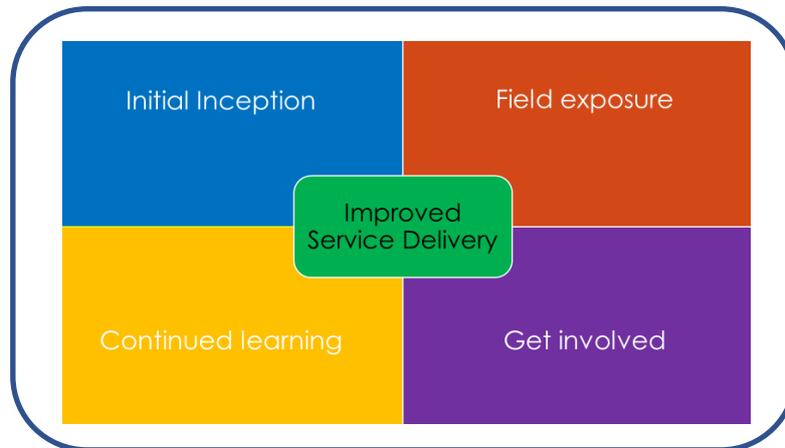
1 st Interactive teaching workshop and classes – online	Module 1, 2, 3, 4 and 5
2 nd Interactive teaching workshop and Project Paper Presentation (5 Days of Contact Classes)	Review of course work, Evaluation and Project Presentation

4. The assignment submission template, question paper/case study/field study will be sent through email to registered participants. Submission of reports through online only.
5. Selection of topic for project will be done in 1st Interactive teaching workshop/online Class after discussion with allocated guide. Synopsis of one page inclusive of title, objectives & methodology to be submitted before start of project work.

Note: It must be noted that due to COVID 19 Pandemic situation, the course work will be offered both through on-line and off-line mode.

Course design has 04 aspects -

Salient features of the Course design



Aspect 1 - Initial Inception to the Course Work

- Candidates receive reading materials & monthly newsletters updates on the programme
- A Guide will be allotted to every candidate to initiate a project work

Aspect 2 - Continued Learning - Stay connected, be involved, and Be supported

- Each candidate must devote 50 hours for the course study materials
- Online quiz will be held at the end of each module to assess knowledge gain.
- Support for consultancy and research activities of the Collaborating Institutions.
- Candidates involve themselves in research activities in an identified area of interest in discussion with allotted guide

Aspect 3 - Field Exposure

- Candidates will participate in exposure visits to project sites where public health nutrition programs are going on and upload their learnings
- Hands on training on key aspects of project implementation

Aspect 4 - Get Involved

- Be recognized
- Continue to receive monthly letters on updates on Public Health Nutrition
- Get updates on policies and improved practice

MODULES AND CREDITS

Module No	Code	Title of modules	HC/SC/Open elective	No. of credits			
				L	T	P*	Total
1		Basic concepts in Food and Nutrition	HC	1		1	2
2		Epidemiology of Malnutrition	HC	1		1	2
3		Public Health Nutrition Policies and Acts/ Food and nutritional security, related policies & act	HC	1		1	2
4		Public Health Nutrition Programmes	HC	1		1	2
5		Community Participation and Mobilization for Nutrition related Programmes	HC	1		3	4
Total				05	0	07	12

* Field based activity sessions

I MODULE

Basic concepts in Nutrition

1. **Introduction to food and nutrition**
 - A. Food a prerequisite to health
 - B. Nutrition and infection cycle (Infection and undernutrition vicious cycle)
 - C. Basic food sources: energy yielding food, body building and protective foods
 - D. Balanced diet
2. **Nutritional deficiency disorders**
 - A. Nutritional Anemia - public Health concern
 - B. Vitamin A and D deficiency
 - C. Zinc deficiency
 - D. IDD - a public health issue
3. **Nutrition – Life Cycle Approach**
 - A. Nutrition during infancy and childhood
 - B. Nutrition during adolescent
 - C. Nutrition during pregnancy and lactation
 - D. Nutrition for adult and geriatric population
4. **Food fortification and nutraceuticals**
 - A. Introduction and basic concepts of food fortification
 - B. Fortification of Oil, salt, Rice and wheat flour
 - C. Introduction to Nutraceuticals
 - D. Therapeutic modification of the normal diet.

Field based activity sessions – Salt testing kits for iodine, observation study by visiting various sites for understanding milk/wheat/oil fortification.

II MODULE

Epidemiology of Malnutrition

1. Health & Malnutrition

- A. Understanding health and wellness
- B. Consequences of Malnutrition- high morbidity, mortalities, cost treatment, low productivity and low economic output at various levels- Individual, household, community, state and nation
- C. Undernutrition- Stunting, wasting, underweight and micronutrient deficiency
- D. Overnutrition - overweight and obesity
- E. Nutrition – Communicable and Non-communicable diseases

2. Intergeneration cycle of malnutrition

- A. Vicious cycle of malnutrition
- B. Integrated approaches to promote nutrition in life cycle
- C. Barker Hypothesis

3. Nutritional assessment

- A. Determinants of nutritional status- household food security, food intake and nutritional status
- B. Indicators for nutritional status (direct and indirect indicators)
- C. Anthropometric measurements

Field based activity sessions – Anthropometric measurements and BMI calculations, Growth Chart Preparation – measuring degree under/over nutrition

III MODULE

Public Health Nutrition Policies and Acts/ Food and nutritional security, related policies & acts

1. Food and Nutritional security

- A. Concept and framework of hunger, food and nutrition
- B. Determinants of Food and nutrition security (availability, access, utilization)
Water, Sanitation and Hygiene (WASH)
- C. Food safety standards (FSSAI)

2. Overview of policies related to nutrition and health

- A. National Nutrition Policy
- B. National Nutrition Mission – POSHAN Abhiyan
- C. National Health Policy 2017
- D. Swachh Bharat Abhiyaan
- E. Agriculture Policy

3. Acts and Regulations

- A. National Food Security Act 2013
- B. Institutional Mechanism

4. New Methods to address the issue

Crop rotation, Warehousing, cold chain and logistics maintenance, information through Kisan Vikas Kendra in villages etc.

Field based activity sessions – Observing WASH activities in community, POSHAN Abhiyan Activities, FSSAI – labeling and nutrition information for basic packaged food items.

IV MODULE

Public Health Nutrition Program

- 1. Schemes and programs on nutrition**
 - A. Integrated Child Development Scheme
 - B. Mid-day meal scheme
 - C. Public Distribution system
 - D. Other flagship programs -NHM, NRC, NDD
- 2. Program Planning, Implementation, Monitoring and Evaluation**
 - A. Models of programme planning in nutrition and Health- Welfare program to right based entitlements
 - B. Management of nutrition program including Monitoring
 - C. Evaluation of Programmes and Methods
- 3. Role of different departments/agencies**

Roles of different departments like Women and Child Department (WCD), Health department, Food Corporation of India, Agriculture dept., Rural Development and Panchayat Raj, Food and Civil supplies, NGO's and Corporates

Field based activity sessions – Observational activities: Visit to Primary Health Center, Sub-Center, Government School, Anganwadi Center, Private Hospital/Clinics

V MODULE

Community Participation and Mobilization for Nutrition related Programmes

- 1. Community Participation and Mobilization**
 - A. Nutrition promotion and communication strategies
 - B. Mobilization of the community through multisectoral and multi stakeholder platform
- 2. IEC/BCC, Advocacy Programmes**
 - A. Audio-visual aids in Nutrition and Health Communication
 - B. Advocacy for health and nutrition
- 3. Study/Observational Project Report**

Field based activity sessions – 1 & 2 Developing IEC/BCC materials - Posters, Pamphlets, Radio Jingles, Short video, etc. for promotion and advocacy. Community mobilization using IEC materials. **For 3** – A report based on visits/observations/study activities carried out during Module 1 to 5 – hard copy to be submitted (three copies) and presentation/viva.

EVALUATION

There will be Five Days contact program & evaluation on each of the module towards the end of the program as per the prescribed norms of the University of Mysore. On-line quizzes will be conducted throughout the course for all modules.

Candidates will present their project work before the evaluation committee.

Total Marks = 200

- Term end exam = 100
- Project work = 100 Marks, Presentation & Final Report carry 50 Marks Each

Candidates who successfully completes the course will be awarded the certificate. The certificate carries the signatures and emblems of the both the institutions.

Course fee includes

- ✚ Course materials, access to library resources
- ✚ On-line classes and mentoring
- ✚ Computer lab during contact classes
- ✚ Lunch and Tea during contact classes
- ✚ Shared accommodation @ IIHMR - Electronic City, Bangalore/University of Mysore during 5-day contact classes.

Course Fee:

- ✚ Per candidate: Rs. 31,000/-
- ✚ For Foreign candidate: 425 USD

The course fee does not include the travel to reach and return from the institutions/field level activities.

Total Seats – 20

READING MATERIALS AND REFERENCES

Reading materials will be given for modules

REFERENCES

1. Bamji, M. S., Krishnaswamy, K., & Brahman, G. N. V. (Eds.). (2013). Textbook of human nutrition. Oxford & IBH.
2. Mann, J., & Truswell, S. (2012). Essentials of human nutrition. Oxford University Press.
3. Nnakwe, N. (2012). Community nutrition: planning health promotion and disease prevention. Jones & Bartlett Publishers.
4. www.fssai.gov.in/home/fss-legislation/fss-registration.html
5. <http://poshanabhiyaan.gov.in/#/>
6. <https://icds-wcd.nic.in/nnm/home.htm>