

ಮೈಸೂರು



ವಿಶ್ವವಿದ್ಯಾನಿಲಯ

ವಿಶ್ವವಿದ್ಯಾನಿಲಯ ಕಾರ್ಯಸೌಧ
ಕ್ರಾಫರ್ಡ್ ಭವನ, ಮೈಸೂರು-5
ದಿನಾಂಕ 21-01-2020

ಸಂಖ್ಯೆ:ಯುಎ.2/379(5)/2016-2017

ಗೆ:

ಆಹಾರ ವಿಜ್ಞಾನ ಮತ್ತು ಪೋಷಣೆ ಅಧ್ಯಯನ ಮಂಡಳಿ(ಸ್ನಾತಕೋತ್ತರ)ಯ
ಅಧ್ಯಕ್ಷರು ಮತ್ತು ಸದಸ್ಯರುಗಳಿಗೆ.

ಮಾನ್ಯರೇ,

ವಿಷಯ: ದಿನಾಂಕ 18-01-2020ರಂದು ನಡೆದ ಆಹಾರ ವಿಜ್ಞಾನ ಮತ್ತು ಪೋಷಣೆ
ಅಧ್ಯಯನ ಮಂಡಳಿ(ಸ್ನಾತಕೋತ್ತರ)ಯ ವಾರ್ಷಿಕ ಸಭೆಯ
ನಡವಳಿಯನ್ನು ಕಳುಹಿಸುತ್ತಿರುವ ಬಗ್ಗೆ.

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ದಿನಾಂಕ 18-01-2020ರಂದು ನಡೆದ ಆಹಾರ ವಿಜ್ಞಾನ ಮತ್ತು ಪೋಷಣೆ ಅಧ್ಯಯನ
ಮಂಡಳಿ(ಸ್ನಾತಕೋತ್ತರ)ಯ ವಾರ್ಷಿಕ ಸಭೆಯ ನಡವಳಿಯನ್ನು ಈ ಪತ್ರದ ಜೊತೆ ಲಗತ್ತಿಸಿ
ಕಳುಹಿಸಲಾಗಿದೆ.

ವಿಶೇಷಾಧಿಕಾರಿಗಳು (ಪ್ರಾಧಿಕಾರ)

ಪ್ರತಿ:

1. ಅಧ್ಯಕ್ಷರು, ಆಹಾರ ವಿಜ್ಞಾನ ಮತ್ತು ಪೋಷಣೆ ಅಧ್ಯಯನ ವಿಭಾಗ, ಮಾನಸಗಂಗೋತ್ರಿ, ಮೈಸೂರು
2. ಜಿ.ವೆಂಕಟೇಶ್ ಕುಮಾರ್, ಡೀನರು, ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ನಿಕಾಯ, ಮನೋವಿಜ್ಞಾನ ಅಧ್ಯಯನ
ವಿಭಾಗ, ಮಾನಸಗಂಗೋತ್ರಿ, ಮೈಸೂರು
3. ಕುಲಸಚಿವ(ಪರೀಕ್ಷಾಂಗ), ಮೈಸೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಮೈಸೂರು.
4. ಉಪಕುಲಸಚಿವರು (ಶೈಕ್ಷಣಿಕ), ಆಡಳಿತ ವಿಭಾಗ, ಮೈವಿವಿ ನಿಲಯ, ಮೈಸೂರು-ಅಧ್ಯಯನ ಮಂಡಳಿಯು
ಶಿಫಾರಸ್ಸು ಮಾಡಿರುವಂತೆ ಸೂಕ್ತ ಕ್ರಮಕೈಗೊಳ್ಳಬೇಕಾಗಿ ಕೋರಿದೆ.
5. ಸಹಾಯಕ ಕುಲಸಚಿವರು/ಅಧೀಕ್ಷಕರು (ಶೈಕ್ಷಣಿಕ), ಆಡಳಿತವಿಭಾಗ, ಮೈಸೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ,
ಮೈಸೂರು
6. ಕುಲಪತಿ/ಕುಲಸಚಿವ/ಕುಲಸಚಿವ(ಪರೀಕ್ಷಾಂಗ) ಅವರ ಆಪ್ತ ಸಹಾಯಕರು, ಮೈವಿವಿ ನಿಲಯ, ಮೈಸೂರು.
7. ಕಾರ್ಯನಿರ್ವಾಹಕರು, ಎಸಿ2(ಎಸ್), ಆಡಳಿತ ವಿಭಾಗ, ಮೈವಿವಿ ನಿಲಯ, ಮೈಸೂರು.

**PROCEEDINGS OF MEETING OF BOS IN FOOD SCIENCE & NUTRITION (PG)
HELD ON 18th January 2020 AT 11.00 am IN THE DEPARTMENT OF STUDIES IN
FOOD SCIENCE AND NUTRITION, MANASAGANGOTRI, MYSORE**

Members present

1. Dr Asna Urooj,
DoS in FSN, UoM, Mysore
2. Dr Sangeeta Pandey,
Mt Carmel's College, Bengaluru
3. Dr Usha Devi.C,
Smt VHD Central Institute of H.Sc, Bengaluru.
4. Dr Sumathi Swaminathan,
St John's Research Institute, Bengaluru
5. Ms Meenakshi Bajaj,
TN Govt Multi Super Specialty Hospital, Chennai
6. Dr. Asha Martin,
FSAQCL,CFTRI, Mysuru.

Urooj 18/1/2020
S. Pandey 18/1/20
U. Devi.C 18/1/2020

P. Sumathi 20/1/2020

Meenakshi 18/1/2020

Asha Martin 20.1.20

Special Invitees

1. Prof U.V.Mani –
Visiting Professor, DoS in FSN, UoM, Mysore
2. Dr Usha Manjunath,
Director, IIHMR, Bengaluru

U.V. Mani

Usha manjunath

Members not present

1. Dr Anila Kumar K.R, DFRL, Mysore
2. Ms Poornima Shankar, The Himalaya Drug Co, Bengaluru
3. Dr Anitha.C, KSOU, Mysuru

Agenda

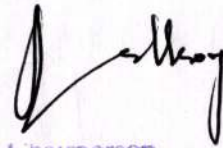
- 1. Panel of examiners 2020-21**
- 2. Review of syllabus**
- 3. Introduction of PG Diploma course**
- 4. UoM-IIHMR collaboration**

The Chairperson welcomed the members to the newly constituted BOS

The members of the Board discussed and resolved the following matter

1. Panel of Examiners for PG examinations for the academic year 2020-21 was scrutinized and approved. Panel is being sent in a sealed cover and CD to the Registrar (Evaluation), University of Mysore, Mysore.
2. The Board reviewed the current syllabus of M.Sc. in Food Science & Nutrition w.e.f 2019-20 and agreed for continuation of the syllabus.
3. In view of the FSSAI initiative in engaging Higher Education Institutions (HEIs) for Food safety and Nutrition courses and also due to demand for trained professionals to work in Food Industries and Food business units, the Board discussed the prospects for introduction of PG Diploma in Food safety, Hygiene and Applied Nutrition w.e.f 2020. The eligibility, duration and course content were finalized and will be sent to University for further approvals. The course will be self-financed and fee structure will be decided in consultation with the University.
4. The Chairperson informed the BOS that University of Mysore has signed an MoU with Institute of Health Management Research, Bangalore (IIHMR) for academic cooperation for undertaking various academic activities including Certificate/Diploma courses, capacity development, research projects, student/faculty exchange, conducting seminars and conferences. Dr. Usha Manjunath, Director, IIHMR, Bangalore gave a power point presentation embodying the above. The first initiative will be a joint 'Certificate Course in Nutrition and Health' to be introduced from 2020. The Board approved the implementation of the course and also finalized the eligibility, duration and course content which will be sent

to the University for further approvals. The course will be self-financed and fee structure will be decided in consultation with the University.

 12/1/2020

Chairperson
BOS in Food Science & Nutrition
University of Mysore
Mysuru - 570 006

UNIVERSITY



OF MYSORE

NEW PROGRAM

Post –graduate Diploma Program:

FOOD SAFETY, HYGIENE and APPLIED NUTRIITON

Two Semester Choice Based Credit based Scheme
&
Continuous Assessment of Grading Pattern System

(FCBCBS-CAGP SYSTEM)

Fully Self finance scheme

SYLLABUS

**DEPARTMENT OF STUDIES IN FOOD SCIENCE AND NUTRITION
MANASAGANGOTRI
MYSURU – 570 006**

2020-21

PREAMBLE:

Food Safety is becoming a global concern Food exports from India need to meet these concerns. Indian food professionals employable in the foreign countries should be capable of developing and managing the food safety systems there.

Of late, Indian food Industry is also getting reorganized with stringent food safety systems either to cater to foreign food markets or to meet the provisions of Indian Food Safety & Standards Act- 2006

To achieve the growing demand of professionals in the Food Safety & Quality Management line, it is imperative that the necessary support infrastructure to train the required manpower is in place. As the food industry advances and adopts various levels of automation, the demand for skilled manpower in the food processing industry will further increase phenomenally

The Food Safety Standards Authority of India (FSSAI) has initiated a framework for engaging Higher Education Institutes (HEIs) to enable a paradigm shift from 'Prevention of Food Adulteration' to 'Self-compliance' by introducing programs on Food Safety and Applied Nutrition.

The professional diploma program is designed to prepare food scientists with appropriate scientific background for job opportunities in food safety and quality assurance, monitoring and certification process in the food industry and Government. The course provides a systematic understanding of food safety issues, their origin and solutions at National and International level and the applicable regulatory mechanisms.

The course offers papers followed by an Industry internship and semester end exam.

Objectives of the course:

- 1- Impart comprehensive knowledge on the issues of food safety and quality**
- 2- Build technical proficiency in undertaking auditing in food safety and quality assurance in food processing chain i.e., from farm to fork.**
- 3- Develop India's capability to meet the global food safety and quality requirements and enhance the competitiveness of food products.**

Number of seats per year: 10 [GM- 7, OBC-1, SC-1, ST-1]

Mode of selection of students: Entrance Test conducted by the University of Mysore for admissions to MSc- Food science and Nutrition

Eligibility for admission

Undergraduate students of Food science and Nutrition/ Food Technology/Applied Nutrition/Food science/Food Processing/Clinical Nutrition and Dietetics/Home science

Course Format

1. This is a full time Professional diploma course of One year, with 40 credits including Theory and Practical Classes, project work, In-plant training and examination.
2. The medium of instruction will be English.
3. Students must complete all credit hours (40) with a 5.5 grade point average.

Internship

Students who successfully complete the above credits will be given opportunities to intern with the below selected Food industries /companies on the prospect that it will be potentially converted into jobs on their abilities.

1. ITC
2. Hector Beverages
3. Del Monte
4. Hatsun
5. Elite foods
6. Britannia
7. Nestle
8. Modern Foods

Fully Self Finance scheme

Fee – Rs 75,000/- for 2 semesters

UNIVERSITY OF MYSORE
Department of Studies in Food science and Nutrition

CREDIT MATRIX FOR Food safety, Hygiene and Applied Nutrition
PG Diploma 2020-21(FCBCS)

Semester I						
Paper code	Title of the Course	HC/SC	L	T	P	Credit
1.1	Food safety and Hygiene	HC	4	0	0	4
1.2	Food security and capacity building	HC	4	0	0	4
1.3	Health Foods & GM foods	HC	4	0	0	4
1.4	Applied Nutrition	HC	4	0	0	4
1.5	Practical 1- Sampling & Analytical Techniques in Food safety	HC	0	0	4	2
1.6	Practical 2 – Microbiological food safety	HC	0	0	4	2
	Total Credits					20

Semester II						
Paper code	Title of the Course	HC/SC	L	T	P	Credit
1.1	Project work	HC	0	0	20	10
1.2	Seminar	HC	0	4	0	2
1.3	Food Industry placement	HC	0	8	0	8
	Total Credits					20

SYLLABUS

1.1 Food Safety and hygiene

{4+0+0=4 C}

1. Introduction to food safety and safe food, naturally-occurring & environmental contaminants, and toxicants. Factors affecting food safety through the supply chain.
2. Sources of contaminants- physical, chemical and microbial hazards in foods, principles underlying spoilage- chemical changes caused by microorganisms in:
 - a. Cereals, pulses and their products
 - b. Vegetables and fruits
 - c. Flesh foods, eggs and poultry
 - d. Milk and milk products
3. Food adulteration, types of adulteration in common foods, impact on human health and tests to detect common adulterants and ad-mixtures.
4. Food safety management systems- Importance and application of food regulation in the Indian and Global context, responsibilities for maintaining and enforcing food safety- FSSAI, CODEX ALIMENTARIUS, HACCP, ISO 22000 series, TQM and codes of GMP. Auditing and accreditation (BIS, QCI, AGMARK etc).
5. Food additives- Definition, classification, role of additives in processed foods. Safe levels of additive uses and the institutions involved in the process.
6. Current scenario- emergence of street foods and convenience foods and the related safety concerns

1.2 Food security and capacity building

{4+0+0=4 C}

1. Introduction to food & nutrition security- Definition, factors affecting food & nutrition security, national and house-hold food security, issues & challenges of food security
2. Food and Agriculture issues- Climate change, soil and environment, biodiversity and ecosystem, global issues in agriculture, green house effect
3. Food supply, food chain safety and security- role of PDS, MDM and ICDS programmes

4. Capacity building in public health nutrition- The need, national and international organisations, nutrition education
5. Integrating nutrition and food security programmes- Good governance practices and human rights principles, Government of India programmes and initiatives.

1.3 Applied Nutrition

{4+0+0=4C}

1. Food choices and issues- Food systems, relationship between diet, nutrition and health, food processing and food safety, contemporary issues relating to nutrition.
2. Nutrients- classification, sources and functions.
 - a. Macronutrients- Carbohydrates, Protein, Fat- functions, sources deficiency disorders and recommended intakes.
 - b. Micronutrients- Minerals – Calcium, Iron, Iodine, and other elements. Vitamins – A, D, E, K, B-complex, Vitamin C.
3. Concepts and principles of current dietary guidelines- general principles of deriving RDA, Reference body weights of Indian adults, significance of RDA
4. Nutrition for health and fitness- Definition, benefits, components and indicators of fitness. Nutritional requirements of exercise- fluids, vitamins and minerals, energy, macronutrient needs and distribution, body adaptation. Approaches to the management of fitness and health in weight management.
5. Alternative systems for health and fitness- Ayurveda, yoga and meditation and other methods.

1.4 Health Foods and GM foods

{4+0+0=4 C}

1. Health foods- Definition, history, types and classification. Functional foods and nutraceuticals, bioactive compounds and anti-oxidants and dietary supplements. Nutrition labelling and health claims.
2. Food Allergy- Causes, food allergens, management & health concerns.

3. Organic foods- definitions, natural and organic food, organic agriculture, labelling & marketing, nutritive content, organic food and farming education & research.
4. Pre- & pro-biotics- definition, uses in food, safety aspects and claims
5. Genetically Modified (GM) Foods- Definition, genetic engineering in foods, genetically engineered plants and animals, potential hazards, GM laws

1.5 Practical 1 – Sampling and Analytical techniques in Food safety {0+0+4=2 C}

- Importance of sampling, sampling techniques and concept of good laboratory practices.
- Analysis of water- physico-chemical & microbiological
- Detection of food adulterants and ad-mixtures in common food using simple tests/ kits.
- Assessment of shelf-life of foods
- Demonstration of proximate analysis of foods
- Field visits to laboratories/ food business units

1.6 Practical 2- Microbiological Food safety {0+0+4=2 C}

- Introduction to aseptic practices and sterilisation, preparation of nutrient media
 - Staining techniques, culture and enumeration techniques
 - Identification of microorganisms
 - Rapid methods and detecting food spoilage specific microorganisms
-