

MOTHER TERESA WOMENS UNIVERSITY -KODAIKANAL

**SYLLABUS
FOR
M.Phil FOODS AND NUTRITION**

**MOTHER TERESA WOMENS UNIVERSITY ,
KODAIKANAL**

M.Phil Foods and Nutrition (for candidates admitted from 2014-15)

Course Name: M.Phil Foods and Nutrition

Eligibility: M.Sc (Foods and Nutrition, Nutrition and Dietetics, Food science and Nutrition and post graduation with nutrition specialization)

Medium: English

Semester I

S.No	Subject code	Subject	Hours/ week	Total credits	Formative Internal assessment /	Summative/ External assessment	Total
1	MFNT11	Research methodology	6	5	40	60	100
2	MFNT12	Advanced paper in Foods and Nutrition	6	5	40	60	100
3	MPST13	Professional skills			40	60	100

Semester-II

S.No	Subject code	Subject	Hours/ week	Total credits	Formative Internal assessment /	Summative/ External assessment	Total
1	MFNA21	Area paper related to project	6	5	40	60	100
	MFND21	Dissertation					200

Research Methodology

MFNT11

5hours/6 credits

Unit-I

Meaning of research-process of research, objectives of research. Developing a research proposal, presentation of a problem, objectives, method, work plan, personnel, facilities and budget. Identifying the problem- defining and delimiting the problem, types of research- fundamentals, applied, action, experimental and descriptive.

Unit-II

Hypothesis- meaning and importance, kinds of hypothesis. Variables- meaning and identification in relation to the research problem-independent, dependent, control and intervening variables. Different type of experimental designs- experimental designs with one variable, experimental design with two or more variables, two by two designs, before and after control group, post test only control group design, salmon four group design.

Unit-III

Research tools- questionnaire, interview schedule, observation, experimentation, attitude scale, check list, socio gram. Scaling techniques-different types- nominal, ordinal, interval and ratio. Characteristics of tools- reliability and validity. Sampling design- probability, non-probability sampling.

Unit-IV

Data analysis- quantitative, qualitative, presentation of data-tables, graphs, illustrations, foot notes and bibliographical presentations. Research reports- basic concepts of research report.

Unit-V

Normal probability and its uses. Parametric tests- large and small samples, Non-parametric tests, Analysis of variance- one way and two way classifications. Multiple and partial correlation- concepts only.

References

1. S.P.Gupta (1993), Statistical methods, Sultan chand and sons, Daryagan, New Delhi.
2. Kothari.C.R.(1991) Research methodology, methods and techniques, Wiley Eastern Ltd, New Delhi.
3. Wilkinson and Bhandarkar. P.L.C. Methodology and techniques of social research, Himalaya publishing house, Bombay.
4. Sharma, B.A.V. Prasad, R.D and sathyanarayana.P(1995) Research methods in social sciences, Sterling publishers, New Delhi.

Advanced paper in Foods and Nutrition

MFNT11

5hours/6 credits

Unit-I

Review of foods and nutrition.

Food production and food supply in relation to population trends. Dietary and nutritional requirements for all age groups. Macro and micro nutrients and metabolic inter relationships, sources, requirements, deficiency and toxicity.

Unit –II

Advances in foods and nut ration, techniques in nutrition research. Role of post harvest technology in preventing food losses. Food toxins, drugs, oral contraceptive agents, antibiotics and nutrition.

Unit-III

Advances in food processing and preservation- food fortification, and enrichment. Novel protein foods, functional foods. Nutrition and infection, population and problems in relation to nutrition.

Unit-IV

Diet in treatment of diseases- PEM, Vit-A deficiency, Iron deficiency, Gastro intestinal, metabolic syndrome, cancer, AIDS and renal diseases.

Unit-V

Maternal and child nutrition, Nutrition and mental development, Nutrition for fitness, space nutrition.

References

1. Potter N.N, Hotchkiss J.H., Food Science, CBS publishers and distributors, New delhi,1996.

2. Swaminathan. M. Essentials of foods and nutrition, vol.1, the Bangalore printing and publishing co.ltd, Bangalore.
3. Gopalan (Ed) Recent trends in nutrition. Oxford University press, New Delhi.
4. Mahan, L.K and Escott, Stump.S (2000): Krauses food nutrition and diet therapy, 11th edition, W.B.Saunders. ltd.
5. Williams S.R. Nutrition and diet therapy C.V. Mosloy co.1973.
6. Antia F.P. Clinical dietetics and nutrition, 3rd edition oxford university press, Bombay 1989.
7. Seth.V and Singh.K. Diet planning through lifestyle in health and disease. A practical manual blaze publisher and distributor, New Delhi,1993.
8. Shills, M.E, Olson, J.A. Shike.M, and Ross, A.C (1999): Modern nutrition in health and disease. 9th edition, Williams and Wikins.

Core III - (Theory)
PROFESSIONAL SKILLS (Common Paper)

Objectives:

After completing the course, the scholars will be able to

- Develop skills to ICT and apply them in teaching, learning contexts and research.
- Acquire the knowledge of communication skills with special reference to its elements, types, development and styles.
- Understand the terms: Communication technology, Computer Mediated Teaching and develop Multimedia/E-content in their respective subjects.
- Develop different teaching skills for putting the content across to targeted audience.

Unit I - Computer Application Skills

Fundamentals of Computers and windows, Operating System – **MS – Office** Components; **Word:** Equation editor, Table Manipulation – Formatting Features – organizational Chart. **MS – EXCEL:** Statistical Functions – Number Manipulation – Chart Preparation with various types of graphs. **MS PowerPoint:** PowerPoint presentation with multimedia features. **Internet and its applications:** E-mail and attachments – working with search engines.

Unit II - Communication Skills (English/Tamil/Both)

English: Skills of Communication: Listening, Speaking, reading and Writing – Writing Synopsis, Abstract and proposals. Developing good language abilities – Public speaking – Writing Skills.

Tamil: பயிற்றுவிக்கும் திறன் - பேச்சுத்திறன் - வெளிப்பாட்டுத் திறன் - ஆய்வுத்திட்டம் - ஆய்வுச்சுருக்கம் தயாரித்தல்.

Unit III - Communication technology

Computer Mediated Teaching: Multimedia, E – Content, Satellite Based Communication – EDUSAT and ETV channels. Web: Internet I Education.

Unit IV - Pedagogical Skills

Micro teaching Skills: Skill of Induction, Skill of Stimulus Variation. Skill of Explaining, Skill of Probing Questions, Skill of Blackboard, Writing and Skill of Closure –Integration of Teaching Skills – Evaluation of Teaching Skills – Research Extension and Consultancy.

Unit V - Industrial Technology

Lecture Techniques: Steps, Planning of a lecture, Lecture Notes, Updating, Delivery of Lecture. Teaching – Learning Techniques: Team teaching, Group Discussion. Seminar, Workshops, Symposium and Panel Discussion – Games and Simulations – Web Based Instructions.

References

- Micael D. and William (2000). Integrating Technology into Teaching and Learning: Concepts and Applications, Prentice Hall, New York.
- Information and Communication Technology in Education: A Curriculum for Schools and Programme of Teacher development. Jonathan Anderson
- Pandey S.K.(2005). Teaching communication. Commonwealth publisher, Delhi
- Sharma. R.A.(2006), Fundamentals of education technology, Surya publication, Meerut
- Kum Babu A. and Dandapani S. (2006), Microteaching, Neelkamal Publications, Hyderabad
- Vanaja M and Rajasekhar S. (2006), Computer Education, Neelkamal Publications, Hyderabad