Bachelor of Education (B.Ed.)

Title of the Course: P.2.19 B: Home Science

(Semester: II)

Credits: 2

MM: 50 (External: 35 Internal: 15)

Contact Week: 15

Introduction of the Course

This course deals with the pedagogical aspects and skill development, community development activities, organizational process development of exhibitions, clubs, workshop based on research in the field of Home Science at various levels of school. Teaching of Home Science is not merely about acquiring knowledge but also about construction of knowledge and also developing essential life skills, such as problem-solving, decision making, and effective communication. The interdisciplinary approach in the subject enables a teacher to offer comprehensive educational experiences.

The emphasis has been on the innovative and creative approaches to various methods and strategies associated with the field of teaching of Home Science leading to holistic transaction of educational experiences. The approach focuses on providing hands-on experiences to individuals, enabling students to develop expertise in organizing Home Science lab experiments and effectively conducting experiments. It also integrates real-life experiences with classroom learning as well as applying classroom learning in day to day life experiences. Therefore, by aligning with the NEP's vision the course seek to equip education with the expertise to cultivate educational experience nurturing students not only academically but to inculcate the practical life skills.

In tandem with the introduction to Home Science, this course is strategically designed to align with Sustainable Development Goals (SDGs), aiming to instill in educators a commitment to addressing societal challenges through the lens of Home Science. The curriculum focuses on nurturing competencies in students, fostering a mindset of lifelong learning and adaptability. Furthermore, the course envisions the future of Home Science education as a pivotal force in vocational building, preparing students for practical applications and careers that align with

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evolving societal needs. This holistic approach ensures that Home Science education goes beyond traditional boundaries, equipping both educators and students to contribute meaningfully to a sustainable and dynamic future.

Learning Outcomes

After completion of the course student will be able to:

1. Foster critical thinking in pupil teachers to adapt and innovate Home Science teaching methods.
2. Develop an understanding, competencies and skills among the pupil teacher to effectively transact home science curriculum at various levels of School education.
3. Plan and modify the setup of Home Science laboratory to conduct practical's according to the changing needs of the curriculum

Number of Units (3) **Weeks 15 = 30 hours**

Unit 1: Curriculum and Pedagogic Issues in Home Science (6 weeks = 12 hours)

- Objectives of teaching of Home Science at elementary, secondary and senior secondary level
- Unit planning
- Lesson planning (Discussion Method, Demonstration Method, Practical Method)
- Integrating interdisciplinary concepts into Home Science curriculum to promote holistic understanding.
- Emphasizing the application of Home Science principles in real-world contexts, on experiential learning and skill development.

Unit 2: Methods & Approaches in teaching Home Science (4 weeks = 8 hours)

- Teaching methods: Demonstration, Discussion, Practical, Project, Problem solving, Seminar, Experimentation, Field trips, ICT, Market Survey, Exhibition, Displays, peer learning, Role play, Brain storming
- Optimal utilization of community resources
- Simulated teaching.

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- Incorporating project-based learning and inquiry-based approaches to encourage exploration and experimentation.
- case studies to analyse local issues related to Home Science, promoting community engagement and social responsibility.
- Cultural sensitivity and diversity in teaching practices
- Promoting inclusivity and gender equity in Home Science education
- Emerging Trends and Innovations
    - ❖ Sustainable practices in Home Science
    - ❖ Integration of STEM (Science, Technology, Engineering, and Mathematics) principles in Home Science education (NEP2020)
    - ❖ Global perspectives in Home Science teaching

Unit 3: Laboratory Organization and Experimentation in Home Science

(5 weeks = 10 hours)

- Setting up and maintaining a laboratory workspace.
- Records and registers
- Purchase, storage and maintenance of material and equipment
- Characteristics, organization and management of Home Science laboratory
- Layout of design of multipurpose Home Science Laboratory
- Sustainability through innovative designs
- Utilizing digital platforms and databases for maintaining records and registers of laboratory activities.
- Green technology, integrating modular and flexible lab design,
- Utilizing software for designing lab layouts and equipment placement, enabling students to visualize and contribute to the planning process.
- Safety Procedures and Protocols:
    - ❖ Understanding and implementing safety protocols in the laboratory.
    - ❖ Handling hazardous materials and chemicals safely.
    - ❖ Emergency procedures and first aid in laboratory settings.

Practicum/ Suggested Projects / Assignments (Any Two)

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1. Home Science Laboratory-
    i. Critical evaluation of existing Home Science laboratory in the school and suggest modification for effective use.
    ii. Planning of ideal Home Science Laboratory for both single subject and Multipurpose use
2. Prototype construction of Home Science laboratory
3. Development of unit and lesson plan
4. Organize a community workshop on urban gardening techniques for growing food in limited spaces, promoting food security at the local level.
5. Explore opportunities for students to develop entrepreneurial skills in areas like food businesses, sustainable home products, or personalized nutrition services.
6. Creating digital portfolios showcasing innovative lab designs and experiments, using tools like Coral Draw to communicate ideas effectively.
7. Designing and conducting independent research projects in Home Science and presenting research findings through posters, presentations, or publications.
8. Applying laboratory skills to real-world problems in home science

Note: On the basis of the above, the teacher may design his/her own relevant projects/ assignments.

Essential/ Recommended Readings

- Bloom B (Ed.). et al. (1965). Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook 1: Cognitive Domain. New York. David McKay Company Inc.
- Chander, A. (1995). Introduction to Home Science. Metropolitan.
- Chandra,A., Shah,A. & Joshi ,A. (1989). Fundamental of Teaching Home Science. Sterling Publishers Private Limited, New Delhi.
- Das R.R and Ray. (1979). Methods of Teaching of Home Science, New Delhi, Sterling Publjation Pvt, Ltd.
- Dash, B. N., & Dash, K. (1986-1987). Teaching of Home Science. Ajanta Prakashan.

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- Devadas, R. P. (1978). Methods of Teaching Home Science. National Council of Educational Research and Training, New Delhi.
- Devdas, Rajamal, P. (1968) Textbook of Home-Science, Farm Information Unit, Directorate of Extension, Ministry of Agriculture, New Delhi.
- Devdas, Rajamal, P. (1968), The Meaning of Home Science, Sri Avinashillingam Home-Science College, Coimbatore.
- Jha, J.K. (2001). Encyclopedia of teaching of Home Sscience.(Vol I&II), Anmol Publications Private Limited, Delhi.
- Kumari, V. L. (2006). Techniques of Teaching Home Science. Sonali.
- Lady Irwin College (1990). A Textbook of Home Science. Orient Longman, Delhi
- Lady Irwin College (2008). Excellence in Home Science: Contemporary Issues and Concerns, Academic Excellence, Delhi.
- Lakshmi, K. (2006). Technology of teaching of Home Science. Sonali Publishers, New Delhi.
- Mullick P. (2004). A textbook of Home Science. Kalyani Publishers, Ludhiana
- Nibedita, D.(2004).Teaching of Home Science, Dominant Publishers and Distributers, New Delhi
- Paintal, I. (1980). Microteaching: A handbook for Teachers. Delhi. Oxford University Press.
- Ram Babu A and Dandapani S (2016) Essentials of Microteaching, New Delhi, Neelkamal Publications Pvt Ltd, 2010.
- Seshaih, P.R. (2004). Methods of teaching Home Science, Manohar Publishers & Distributors, Chennai.
- Shah, A. et al (1990). Fundamentals of teaching Home Science. Sterling Publishers Private Limited, New Delhi.
- Shalool, S. (2002). Modern methods of teaching of Home Science.(I Edition).Sarup &Sons. New Delhi.
- Sharma S. (2004). Modern Methods of Teaching Home Science. Sarup and Sons Publishers, New Delhi
- Tikoo,S. (2010). Professionalism in Home Science, Academic Excellence, New Delhi.
- Yadav, S. (1997). Teaching of Home Science. Anmol Publishers, New Delhi

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- **Additional Readings**

- Malaviya,R. (2006), Advanced dictionary of Home Science, Arise Publishers, New Delhi. ISBN 81-89557-13-0
- Malaviya,R. (2010). Influence of Technology: Adolescent's Interests, Journal of Psychosocial Research, Vol.5 No.1
- Malaviya,R. & Kakkar,A. (2018), Interiors of a classroom: Influences on teaching-learning processes, Global Book Organization. ISBN 9789383837
- Nutritive Value Of Indian Foods (2017), ICMR,NIN
- Thapar, V. (2004). Home Science Related SUPW Activities: A Manual. ISBN: 9788188901111.
- Swaminathan. D. M. (2013). Handbook of food and nutrition. The Bangalore Printing & Publishing Co. Ltd.
- Swaminathan, M. (1988). Advanced textbook on food and nutrition.

Teaching Learning Process

The course will be taught through interactive pedagogic methods such as classroom discussion, debates, film discussions, critical media analysis, collaborative learning tasks which enhance reading comprehension of core writings in the area and innovative projects. Reflective expression and learning will be encouraged.

Assessment Method

The assessment will be formative in nature and will factor in student participation. Individual and group tasks and assignments will be given. Summative evaluation will be done through end-semester examination.

Key words: Skill Development, Community Development Activities, Organizational Process Development, Laboratory Organization, Sustainability.

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