SARDAR PATEL UNIVERSITY  
SCHEME FOR Ph.D. (Home Science) Coursework  
FAMILY RESOURCE MANAGEMENT

Course Title: Research Methodology and Scientific Writing  
credits:3

Unit I (A) Introduction – types (exploratory and conclusive), process of research, language, 
philosophy, ethics, patent laws, copy right and cyber laws
(B) Sampling – statistical terms, probability and non-probability, criteria for selecting 
sample procedure, characteristics of good sampling procedure.
(C) Measurement – construct validity, reliability, levels of measurement

Unit II (A) Survey research-types of surveys, selecting survey method, constructing the survey, 
Interviews, advantages and disadvantages of survey methods
(B) Scaling, general issues
(C) Qualitative and unobtrusive measures

Unit III (A) Research Design – introduction, types
(B) Experimental Design – introduction, classifying experimental designs, factorial 
Designs, randomized block design, covariance design, hybrid experimental design
(C) Quasi-experimental design- non equivalent groups design, regression-discontinuity 
design, other quasi-experimental designs

Unit IV (A) Analysis of results conclusion validity, data presentation, descriptive statistics as per 
subject specialization
(B) Data presentation – tabular and graphical

Unit V (A) Scientific writing- steps for better writing, flow of information, organization 
of material, footnotes and references
(B) Writing of: Research paper, article, report, thesis, proposal
(C) Oral presentation

References:

1. Trochim M.K William, Research methods, Biztantra, New Delhi
OBJECTIVES:
(1) To equip the students for academic excellence, enhancement of life and enable them to apply scientific knowledge and methods while working in home, institution and industry.

Unit – I
Advances in discipline of resource management: classical approach; behavioural approach; system approach and scientific management.

Unit – II
Managerial decision making: techniques, modes, creativity, rationality, risk and certainty, team management.

Unit – III
Management process: planning, techniques & dimensions; organization: principles & types; staffing and recruitment: concepts and principles.

Unit – IV
Directing: types and significance; controlling: types and significance, monitoring and evaluation: tools and techniques; Motivation: theories and approach; leadership: theories and styles.

Unit – V
Current trends in resource management, socio-economic environment impact on families and organization, stress: concept and management; group behaviour and dynamics
OBJECTIVES:

(1) To acquaint the students about various consumers issues related to products and services.

(2) To provide knowledge and skill to the students related to consumer protection for rational consumer behaviour.

Unit – I
Globalization, liberalization, privatization and its impact on consumer behaviour, profiles of consumers in India and abroad, public and private sector goods and service provider.

Unit – II
Consumer’s problems and challenges, gender issues in consumerism, consumer empowerment, aggregate consumer behaviour over time, diffusion of innovation: brand loyalty.

Unit – III
Consumer protection and redressal: problems and prospects, laws and regulations redressal mechanism; role of media and organization.

Unit – IV
Significance of consumer guidance and counselling, consumer protection measures, legal and non-legal issues, consumer protection councils.
OBJECTIVES:

(1) To equip the students about ergonomics related to man, machine and environment system interactions and its application in reducing human cost of work.

**Unit – I**
Human work physiology: application of bio mechanics to movement, qualitative and quantitative approach.

**Unit – II**
Occupational stress: causes, measurements and remedies; manual material handling: seating postures and tool design.

**Unit – III**
Ergonomic task analysis and risk assessment at work places, Tools and techniques to assess and control ergonomic hazards at work places

**Unit – IV**
Environmental stress factors such as heat, noise and light; effect and control of heat stress; noise pollution and its impact on work efficiency, visual ergonomics.

Courses Code: PH05EFRM03
Courses Title: SUSTAINABLE DEVELOPMENT: INITIATIVES AND APPROACHES

Credits: 3 + 0

OBJECTIVES:
(1) To expose the students to global environmental issues and strategies.

Unit – I
Introduction to technology and environment, state of Indian environment, energy flow audit and economy – green strategies.

Unit – II
Sustainable development- international perspective, global environment issues and its impact on the growth of industries.

Unit – III
Environment protection and law, environment impact assessment, environmental audit, national and international efforts in improving environmental quality.

Unit – IV
Solid waste management, scenario, practices and strategies to control.