

Department of Agricultural Extension and Communication

SHIATS

1st Semester M.Sc. Ag.Extension

Sl.No.	Course Title	Course Code	Credits
1.	Extension Education & Rural Development	EXT - 811	3(2+0+2)
2.	Communication and Extension Teaching Methods	EXT - 812	3 (2+0+2)
3.	Methods of Extension Research and Evaluation	EXT - 813	3 (2+0+1)
4.	Process and Media of Communication	EXT - 814	3 (2+0+2)
5.	Statistics	MAS - 711	3 (2+0+2)
6.	Computer Orientation	COMP-705	3 (2+0+2)

2nd Semester M.Sc. Ag.Extension

Sl.No.	Course Title	Course Code	Credits
1.	Programme Planning	EXT - 815	3(2+0+2)
2.	Rural sociology for Extension Education	EXT - 816	3(2+0+2)
3.	Theory and Practice of Training	EXT - 819	3(2+0+2)
4.	Statistics	MAS -715	3(2+0+2)

3rd Semester M.Sc. Ag. Extension

Sl.No.	Course Title	Course Code	Credits
1.	Agricultural Journalism	EXT - 822	3(2+0+2)
2.	Adoption & Diffusion of Innovation	EXT - 818	3(2+0+2)
3.	Group Dynamics and Leadership	EXT - 826	3(2+0+2)
4.	Administration and Supervision in Extension Education	EXT - 827	3(3+0+0)
5.	Seminar	EXT - 821	3(2+0+2)

4th Semester M.Sc. Ag. Extension

Sl.No.	Course Title	Course Code	Credits
1.	Seminar	EXT - 821	1(1+0+0)
2.	Thesis	EXT - 888	15(0+0+15)

Syllabus of M.Sc. Agricultural Extension

EXT- 811 Extension Education And Rural Development Credit 3(2-0-2)

Extension education – Concept, principles, philosophy and objectives of extension education, History and growth of Extension work in India. Formal and informal education-similarities and differences between extension education and community development – salient features of C.D. and N.E.S. programme, Extension Education as a discipline and profession-its relationship with other subject matter field and allied social sciences. Role of extension education in development programme: comparative studies of extension education system in selected developed and developing countries. Change agriculture developments/ rural development programme in India-leading to the concepts of reorganized extension services and integrated rural development programme, working principles of T & V system. Rural Development- concept and strategies. Approaches to development programmes.

Practical- Visit to block and other extension institutions to study their working and staffing. Each of the students will be allotted a village near institute and will study the extension work being carried out there. They will contact farmers and then lay out new technology in agriculture and about the supporting agencies.

Reference Books

1. Extension, Communication & Management (1999) by Ray G.L
2. Education and Communication for Development by Dhama O.P & Bhatnagar
3. Extension Education (2008) By Dasgupta D.

EXT 812 Communication And Extension Teaching Methods Credit 3(2-0-2)

Meaning of extension teaching method and audio-visual aids, characteristics of teaching and learning process in extension education. Steps in extension teaching, elements of extension teaching, role of teaching methods in extension process.

Classification of extension teaching methods, criteria for classification-individual contact, group contact and mass contact, verbal, written and visuals, factors influencing the choice and use of extension teaching methods. Relative effectiveness of different extension teaching methods. Audio-visual aids and their role in transfer of technology. Social psychological considerations in use of audio-

visual aids, combining and using audio-visual aids for effective teaching production of low cost audio-visual aids.

Practical:

Preparations of posters, leaflets, posters, charts, flash cards, formal groups, and circular letters.

Reference Books

1. Extension, Communication & Management (1999) by Ray G.L
2. Communication by Rayudu C.S.
3. Education and Communication for Development by Dhama O.P & Bhatnagar

EXT 813 Methods of Extension Research & Evaluation Credit 3(2-0-2)

Evaluation- meaning, types, principles, importance criteria, evidence & objectives.

Research – the scientific methods, meaning, characteristics, types, objectives

Characteristics and problems of extension research, selection of research problems guidelines, sources, motivating factors, problematic situations.

Hypothesis: meaning, importance, characteristics of hypothesis.

Variable – meaning and types of variables.

Measurement – meaning and level of measurement

Validity & reliability of measuring devices.

Research Design –meaning, design of Social research including experimental design. Tools of data Collection- schedules, questionnaires, observation, case study, content analysis.

Sampling-types, procedure, merits and demerits, interviewing techniques,

Tabulation and classification of data.

Steps involved in thesis writing, writing bibliography, references and footnote.

Practical:

Preparation of research design for various problems in extension, preparation and administration of tools and techniques of data collection, working on different steps involved in a social research project. Students will be required to conduct evaluation with farm families in the villages and write a report.

Reference Books

1. Foundation of Behavioural Research by Fred.N. Kerlinger
2. Scientific Survey and Social Research by Pauline V.Young
3. Research Method in Extension Education by Suwnati Mulay

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Communication process: Meaning of communication; Elements of communication, the purpose of communication process;

Communication Approaches: Social, psychological and mathematical communication behavior, Communication skill empathy, Fidelity : meaning and factors affecting fidelity; types of communication interpersonal group & Mass Media traditional communication, their meaning and differences ; Models of communication, Theories of communication process; directions of communication process; Barriers of communication process; Development communication – concept & Models. Traditional media and their types, role and function, media mix. Communication strategy for Agricultural development. Significant researches in and their implication.

Practical:

Handling of different communication media, developing communication skill, collection of data regarding number of sources used; channels used and credibility of channels. Visit to AIR and TV center and press.

Reference Books

1. Extension Education; Core contents & Emerging Areas (2008) by Das Gupta. D
2. Extension Education by Dasgupta D
3. Communication by Rayudu C.S.

EXT 815 Programme Planning

Credit 3(2-0-2)

Meaning of the terms-programmes, planning, programme planning, plan of work, calendar of work. Programme Planning-meaning, principles & steps in programme planning components of programme planning, abilities needed by planners, programme development model, programme-planning process. Steps of programme planning process.

Farm planning concept, meaning, importance in extension work, steps involved in farm planning, critical analysis of India's Five year plans with specific reference to agriculture. National Demonstrations, Operations research project and lab to land programme as application of PERT and CPM techniques in Extension programme

building Rapid Rural Appraisal Technique. Monetary & evaluation of extension programme.

Practical:

Students will be required to develop farm and home plan with people in the village that will improve farming and family living for the farm family and apply the principle and process of determining extension programme with people.

Reference Books

1. Extension Programme Planning by Sandhu A.S.
2. Extension, Communication & Management (1999) by Ray G.L
3. Extension Education; Core contents & Emerging Areas (2008) By Dasgupta . D

EXT 816 Rural Sociology for Extension Education **Credit 3(2-0-2)**

Definition of rural sociology and its relationship to other social sciences with special reference to extension, need for studying sociological principles, concept of human society, relationship between society, culture family kin, plan, caste and religion, structure and function of social organization; various forms of culture and their importance in extension work social process, social control, social mobility, social change and the process of changes coming in Indian Rural Society. Analysis of social system, Loomi's model (Status, role power, standards, value, norms facility). Social Process - Cooperation, accommodation, assimilation, competition, contravention conflict and rivalry.

Reference Books

1. Introductory to Rural Sociology by J.B Chitamber
2. Society by MacIver and Page
3. What is Sociology by Alex Ankles
4. Sociology by John F Cuber

EXT 818 Adoption And Diffusion of Innovations **Credit 3(2-0-2)**

Concept of adoption and diffusion, adoption process, stages, rate of adoption process, stages; rate of adoption, categories, and elements of adoption and diffusion. Innovation-meaning, characteristics, steps involved in introducing an innovation in a community.

Culture, norms, and diffusion, importance of culture in diffusion, traditional and modern dimensions, social systems, norms and innovations.

Opinion leaders, the two step flow of communication, role of change agent in adoption and diffusion in innovations, problems of change agent system, client system and technology.

Factors affecting diffusion and adoption of innovations, recent researches on adoption and diffusion with special reference to agriculture.

Models and theories of diffusion.

Practical:

Identifying farmers at different stages of adoption and accelerating the process with reference to the farm innovation in a village, locating farmers of different adopted categories by the students in a village and reporting the data collected etc. Exercise in introduction an innovation in a social system from initiation to its ultimate use by the potential farmers.

Reference Books

1. Communication in innovation by Rogers and Shoemaker
2. Diffusion of innovation By Evert M. Rogers
3. Extension Education by A.A. Reddy

EXT 819 Theory And Practice of Training

Credit 2(2- 0- 2)

Training – meaning and strategies, Training of extension personal and farmers, principles and importance of Extension Training, types of training programme for Extension personnel and farmer; Emerging and models of Extension Training, Factors affecting efficiency of Extension Training. Methods of identifying training needs, small group technique in training, Assessing training effectiveness, different methods of Training.

Reference Books

1. Extension Education for Human Resource Development by Kumar & Hansra
2. Training for Development (1990) by Lynten, R. P & Pareek U
3. Management of Training: Guide for Trainers by B.Kumar & S.K. Kashap.

EXT 822 Agricultural Journalism

Credit 3(2- 0- 2)

Concepts of agricultural journalism and agricultural communication, agricultural Journalisms as mean of mass communication, its forms and role in rural development progarmmes, opportunities, strength and limitation in India. Relation of press with government and society. Readability of literature, genesis of readability tests, clarity and brevity in writing. Principles and techniques of writing, news stories features, articles, magazine articles, farm bulletins and folders. Fundamentals of

layout- various elements and their balancing, techniques of editing and publishing technical journals, research agricultural Journalism and its applications.

Practical:

Designing and layout preparation of cover design for farm magazine, folders etc. and laying of marital process of printing extension literature. New collection and report writing magazine features articles and scripts for techniques folders, technique of pre-testing readability. Each student select one team of publication and produce dummy design layouts.

Reference Books

1. Writing for farm families by Kamath,M.G
2. Mass Communication & Journalism in India .(2006) By Mehta D.S
3. Farm Journalism (2004) By Mukhopadhyay

EXT 826 Group Dynamics and Leadership

Credit 3(2-0-2)

Group: Definition, characteristics and types group morale, group dynamics- methods of group work principles and processes of involving people.

Leadership : definition, concept role and function of leaders, types of leader follower relationship, leadership and leader behaviour, kinds of leaders in the rural community, general characteristics of lay leader, identifying leaders, responsibility of extension worker in leadership development, emerging pattern of leadership in Indian villagers, training leaders for leadership in extension programme (case studies and empirical findings pertaining to group dynamics and leadership methods of studying in group dynamics such as group discussion, dialogue, Buzz session, brain storming seminar, symposium panel discussion, role playing, Hardle methods) recent researches in group dynamic process.

Practical

Student will be required to identify local leaders through different technique including socio-grams. They will study various group and detect their behavior and relationship with leaders of the respective groups. Students will participate in training progrmmes meant for village functions leaders.

Reference Books

1. Organizational Behaviour by Fred Luthain
2. Extension and Communication for Development by O.P. Dhama and Bhatnagar
3. Extension Education G.L. Ray



EXT 827 Administration & Supervision in Extension Education Credit 3(3-0-0)

Administration – meaning, nature & purpose, functions of the administrators- Planning organizing, staffing, directing coordinator, reporting, and budgeting.

Principle of sound administration including span of control, line of authority and responsibility, delegation of authority. Administrative theories.

Personnel recruitment and management; job description, selection, placement training, staff morale and human relations. Office and fiscal management. Working environment and professional dedication in extension organizational climate and management by objectives.

Supervision in Extension, meaning, purpose, role and function of a supervisor, Principles and art of supervisor.

Extension administration vs. general administration with special reference to extension service in India. Organizational setup for extension service including T & V system at different levels.

Reference Books

1. Public administration in theory and Practice by Dr. M.P. Sharma, Dr. B.L Sadava
2. Administrative Theory By Dr.Hosiar Singh, Dr. Pradeep Sacheva
3. Extension Communication and Management G.L Ray

BASIC SUPPORTING COURSES

MAS 711 Statistics – I (Regression, Correlation) Credit 3(2-0-2)

Statistical Methods: Measures of Skewness and Kurtosis, standard error of mean, Coefficient of variation. Theory of Probability: Definitions, Additions and Multiplication rules of Probability, Conditional Probability. Probability distributions: Normal, Binomial and Poisson distributions. Correlation and Regression: Simple correlation, Rank correlation, Regression Coefficient, Multiple and Practical correlation, Regression lines between two variable, Multiple Regression.

Tests of Significance: χ^2 -test

t –test: one sample, two sample t – tests, paired t – test.

Testing of Correlation Coefficient, Standard normal variable test.

F-test:

Fisher's 2- transformation

Practical:

Co-efficient of variation, SE of mean, Skewness and Kurtosis

Fitting of Normal, Binomial and Poisson distribution

Simple Correlation, Multiple and Partial Correlation with three variables only

Regression lines between two variables

X^2 , t and F - tests

Reference Books

1. A Text Book on Fundamentals of Applied Statistics by Dr. Jitendra Kumar
2. An Introduction to Mathematical Statistics & Its Application by Richard Larson & Morris Marx
3. An Introduction to the Theory of Statistics G. Uday Yule & M.G Kental

MAS715 Statistics – II (Design of Experiment and Analysis of variance)**Credit 3(2-0-2)**

Analysis of variance: Definition and assumptions, one way classification, two way classification. Sampling Techniques: Simple random sampling, stratified random sampling, systematic sampling. Design experiments: Randomized block design, Latin square design, Factorial design (2^2 , 2^3 , 3^2 , 3^3 factorials), Some P x q factorial experiments, split Pot experiments. Balanced incomplete block design.

Practical :

Analysis variance, Randomized block design.

Reference Books

1. Agricultural Statistics by Rangaswami
2. Design and Analysis of Experiments by M.N Das & N.C. Giri
3. Sampling Theory of Surveys with Application by P.V Sukhotme , S. Sukhatme , BV Sukhotmu, L Ashok

COMP 705 Computer Orientations**Credit 3(2-0-2)**

Introduction to multi programming and time sharing computer. Login and creation of files. Introduction to structured programming with reference to BASIC. Variables and constants, complex double precision, logical, and character. Arithmetic expressions, arrays, control statements (DO, IF, Computed GOTO).Functions and subroutines. I/O statements, Elementary programming of algorithms.

Reference Books

1. Computer and Language by Chanchal Mittal
2. Fundamentals of Computer and Programming with C by J.B. Dixit
