LECTURER IN CHARGE: **DR. A. A. AMORI & MR. J.A. ADEJUWON**

DEPARTMENT OF WATER RESOURCES MANAGEMENT AND AGROMETEOROLOGY

COURSE: **WMA 508: AGROMETEOROLOGICAL METHOD & APPLICATION**

COURSE OUTLINE

MODULE I. STATISTICS AND AGROMETEOROLOGY
*Reasons for the Introduction of Statistics in Agrometeorology
*Benefits
*Problems
*Steps in the Application of Statistics in Agrometeorology

MODULE II. DESCRIPTIVE STATISTICS
*Scope
*Types of Measures: Central Tendency, Dispersion, Location etc.
*Data Ordering, Classification
*Sources of Error and Bias

MODULE III. INFERENTIAL STATISTICS
*Nature and Scope
*Types
*Conditions and Assumptions
*Areas of Applications

MODULE IV. TESTS OF HYPOTHESIS
*Nature and Types of Hypotheses
*Importance of Hypotheses in Agrometeorology
*Procedures for the testing of Hypotheses
*Errors in Hypotheses Testing
*Practical Applications

MODULE V. PARAMETRIC STATISTICS
*Nature
*Types
*Conditions & Application
*Practical Examples
*Problems

MODULE VI. NON-PARAMETRIC STATISTICS
*Nature
*Types
* Conditions & Assumptions
*Practical Examples

*Problems

MODULE VII. MULTIVARIATE STATISTICS AND AGROMETEOROLOGY
*Nature of Multivariate Statistics
*Types and Scope
*Conditions and Assumptions
*Applications
*Benefits and Limitations

MODULE VIII. COMPUTERS AND AGROMETEOROLOGY
*The Advent & Rise of Computer
*Relevance Computer to Agrometeorological Investigation
*Scope of Computer Operations
*Benefits and Problems of Computer Application
*Recent Developments

NOTES

WMA 508: AGROMETEOROLOGICAL METHODS AND APPLICATIONS is a compulsory course designed for agrometeorology (special option students). It is specially designed to equip students with the skills with which to handle any set of data they may be faced with. The course will treat problems and establish statistical theories and models can be used to solve agrometeorological problems.

It will also dwell on relevance of everyday statistics to current happening in the fields of agrometeorology such that it can be better appreciated by potential students in agrometeorology.

Suggested further Readings

Ayoade, J.O. (2009) Techniques in Climatology. Ibadan: Stirling Hodden Publishers, 210pps.