

Course Description

Epi 201 Principles of Epidemiology. Ecology of human diseases and epidemiologic methods.

Biostat 206 Research Methods I. Principles of field investigation; sampling methods in the study of health problems of human populations.

Biostat 206.1 Research Methods II. Implementation of a research proposal.

Biostat 207 Nonparametric Procedures in Biometric Research. Clinical trials; application of sequential methods and standard nonparametric tests in the analysis of biological and health data.

Biostat 209 Experimental Design. Design and analysis of experiments with emphasis on health-related and biological phenomena.

Biostat 210 Categorical Data Analysis. Statistical methods for analyzing categorical data by means of log-linear, linear and logistic models. Emphasis is on the practical application of methods rather than their theoretical basis.

Biostat 211 Computer Applications in Biostatistics. Computer programming applied to biomedical and public health problems.

Biostat 212 Sample Surveys. Estimation of parameters and standard errors for different sampling designs.

Biostat 213 Applied Regression Analysis. Applications of simple and multiple regression and correlation analysis, polynomial regression and logistic regression to biomedical data.

Biostat 214 Applied Multivariate Analysis. Application of commonly used multivariate techniques for statistical analysis. Emphasis on the use of computer programs and interpretation of results rather than the theoretical basis of the different techniques.

Biostat 215 Survival Analysis. Overview of statistical methods for the analysis of laboratory and clinical data related to survival, life table analysis, estimation of survival functions and hazard rates for complete censored data, concomitant variables and competing risks.

Biostat 231 Introduction to Probability Theory. Concepts and laws of probability, characteristics of distribution function; common discrete and continuous distributions; probability distribution functions of random variables.

Biostat 232 Introduction to Statistical Theory. Theory of parametric estimation and hypothesis testing, methods and criteria for finding estimators and constructing test statistics.

Biostat 297 Seminars. A series of seminars on various topics in health statistics.

Epi 202 Statistical Methods in Epidemiology. Concepts and techniques for measuring relationships between variables.

Epi 204 Study Designs in Epidemiology. Design, conduct and analysis of epidemiologic studies.

Epi 205 Evaluation Research. Approaches in the assessment of effects of health intervention.

Biostat 234 Introduction to Generalized Linear Theory. Theories and applications of generalized linear models to regression and analysis of variance.

Biostat 235 Introduction to Theories of Multivariate Analysis. Theories and applications of common multivariate techniques.

Faculty Profile

Professor Emeritus

Ofelia P. Saniel, MPH, PhD

Professor

Ma. Carmen C. Tolabing, MPH, DrPH

Associate Professor

Abubakar S. Asaad, MAT, MOS, PhD

Assistant Professor

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Amiel Nazer C. Bermudez, MD, MPH

Kim L. Cochon, RND, MSPH

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Maylin C. Palatino, MSPH

Paul Adrian V. Pinlac, MD, MPH, MSc

Instructor

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Harvey C. Domingo, PTRP

Jordan P. Santos

Application forms may be obtained from and mailed/returned to:

THE DIRECTOR

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Further inquiries may be sent to:

THE MSPH (BIOSTATISTICS) PROGRAM COORDINATOR

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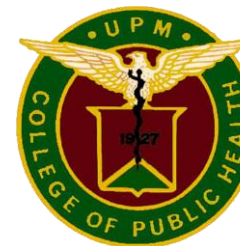
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COLLEGE OF PUBLIC HEALTH

University of the Philippines Manila

The Health Sciences Center

**Master of Science in
Public Health
(Biostatistics)**



SEAMEO TROPMED

Regional Centre for Public Health,

Hospital Administration,

Environmental and Occupational Health

Rationale and Objectives

Over the past decade or so, there has been an increasing demand for competent biostatisticians who have both the strong biological background as well as the statistical facility to appreciate, analyze and interpret biomedical and public health problems. While most of the existing graduate and training programs on statistics are oriented towards economics, marketing and consumer research and agriculture, the MSPH (Biostatistics) program provides the requisite collaborative blending of the life sciences with statistics.

At the end of the program, the graduates should be able to:

- Design, implement, and evaluate public health programs;
- Design, implement, and use research findings for policy development and institution building;
- Employ statistical techniques in analyzing and interpreting public health and medical data;
- Provide technical services related to biostatistics;
- Design and implement a statistical data management plan;
- Implement appropriate health promotion and education strategies in addressing public health issues;
- Practice inter-professional collaboration in public health service while adhering to professional, social, and ethical standards;
- Effectively use Filipino and English communication skills in both oral and written form; and
- Exemplify positive Filipino values (e.g. *damayan*, *bayanihan*, hospitality, compassion) in the conduct of public health practice.

General Information

- The academic year is divided into 2 semesters of 16 weeks each, and a short term with only 6 weeks
 - First semester : August - December
 - Second semester: January - May
 - Short term: June - July
- The medium of instruction is English.
- The usual academic load of full - time students is 12 - 15 units.
- The tuition fee is Php 990.00 per unit and the miscellaneous fees amount to approximately Php 1,360 per semester.
- International students must pay an Educational Development Fund of US \$ 500.00 (or US \$ 100.00 for residency) per semester.
- Application Fee : Php 300.00 for Filipinos
US \$ 30.00 for international students

* Fees subject to change without prior notice

Admission Requirements

1. Must fulfill the general admission requirements of the National Graduate Office of UP Manila.
2. Good scholastic record from any recognized institution of higher learning.
3. Must be graduates of approved schools of medicine and/or allied professions or have at least a baccalaureate degree in the biological sciences.
4. Approval of the applicant's qualification for graduate work in the MSPH (Biostatistics) by the faculty of the Department of Epidemiology and Biostatistics.

Graduation Requirements

1. Residency for at least one full academic year prior to the granting of the degree.
2. Completion of a minimum of 42 units

<u>Plan A (Thesis)</u>	
Required Formal Courses	26 units
Practicum	2 units
Biostatistics/Epidemiology Electives	4 units
Cognates	4 units
Thesis	6 units
<u>Plan B (Comprehensive Exam)</u>	
Required Formal Courses	26 units
Practicum	2 units
Biostatistics/Epidemiology Electives	7 units
Cognates	4 units
Special Studies	3 units
3. Satisfactory completion and submission of 6 bound copies of a master's thesis for Plan A.
4. Submission of publishable form of master's thesis.
5. Passing the comprehensive exam for Plan B.
6. General weighted average of 2.00 or better in the major courses and in all courses taken provided there is no grade of 5.00 in any subject.

Residence Requirements and Time Limit

- Minimum residence required: 2 semesters and 1 short term
- Maximum residence rule (MRR): 5 calendar years including official leaves of absence
- If the MRR is exceeded, further extension of not more than 1 year shall be allowed subject to the recommendation of MSPH Program Committee and approval of the Chancellor

The Curriculum

Core Course		3
Epi 201	Principles of Epidemiology	3
Major Courses		21
Biostat 206	Research Methods I	2
Biostat 206.1	Research Methods II	1
Biostat 209	Experimental Designs	2
Biostat 211	Computer Applications in Biostatistics	3
Biostat 212	Sample Surveys	2
Biostat 213	Applied Regression Analysis ^a	2
Biostat 214	Applied Multivariate Analysis ^a	2
Biostat 231	Introduction to Probability Theory	3
Biostat 232	Introduction to Statistical Theory	3
Biostat 297	Seminars	1
Other Required Courses		2
Epi 202	Statistical Methods in Epidemiology	2
Practicum^d		2
Biostat 292	Practicum in Statistical Consulting	2
Biostat 293	Practicum in Teaching of Biostatistics	2
Special Studies^c		
Biostat 299	Special Studies and Research ^c	3
Electives		4^b or 7^c
Biostat 203	Demographic and Vital Statistics	2
Biostat 205	Statistical Methods in Bioassay	2
Biostat 207	Non-Parametric Procedures in Biometric Research	2
Biostat 208	Statistical Design and Analysis of Data in Clinical Trials	2
Biostat 210	Categorical Data Analysis	2
Biostat 215	Survival Analysis	2
Biostat 294	Specialized Methods in Biostatistics	2
Epi 203	Communicable Disease Control	2
Epi 204	Study Designs in Epidemiology	2
Epi 205	Evaluation Research	2
Epi 206	Epidemiology of Non-Communicable Diseases	2
Cognates^e		4
Thesis^b		6
Biostat 300.1 and 300.2	Masters' Thesis	6
TOTAL		42

a - For those interested in a career in the academe these courses may be substituted with Biostat 234 (Introduction to Generalized Linear Theory) and Biostat 235 (Introduction to Theories of Multivariate Analysis)

b - For those pursuing Plan A (with thesis)

c - For those pursuing Plan B (without thesis)

d - A student may choose either one of these two courses

e - Other courses that are related to the field of specialization may be taken