

**The University of Oklahoma
College of Public Health
Department of Biostatistics and Epidemiology**



***Doctor of Philosophy
Biostatistics***

I. Required Courses:

A. College of Public Health

One of the following:

HAP 5113 Health Organization & Administration

OEH 5013 Environmental Health

HPS 5213 Social & Behavioral Sciences in Public Health

B. Departmental Core Courses

BSE 5001 Problems in Biostatistics and Epidemiology

BSE 5013 Applications of Microcomputers to Data Analysis

BSE 5023 Computer Applications in Public Health

BSE 5113 Principles of Epidemiology

BSE 5153 Clinical Trials

BSE 5163 Biostatistics Methods

BSE 5173 Biostatistics Methods II

BSE 5193 Intermediate Epidemiologic Methods

BSE 5303 Epidemiology of Infectious Diseases

BSE 5363 Epidemiology and Prevention of Chronic Diseases

BSE 5663 Analysis of Frequency Data

BSE 6192 Grant Writing

BSE 6643 Survival Data Analysis

BSE 6663 Multivariate Biostatistics

and

C. Departmental Major Courses

BSE 5703 Principles of the Theory of Probability

BSE 5733 Principles of Mathematical Statistics I

BSE 5743 Principles of Mathematical Statistics II

BSE 5653 Non-Parametric Methods

BSE 6403 Experimental Design I

BSE 6553 Linear Models

II. Elective Courses

Students must select at least 18 hours of elective courses in addition to those listed above. These must be approved by the student's Advisory Committee. At least 12 of these hours must be taken in this Department. The following courses may not be used to satisfy this requirement: BSE 5103, 5941, 5980, 6950, or 6980. At least 30 credit hours must be earned at the University of Oklahoma after admission to the PhD program.

III. Dissertation

The student must enroll for at least 12 hours in BSE 6980 Research for Doctoral Dissertation. No more than 20 hours in BSE 6980 may be applied toward the minimum 90 hours required for the degree.

IV. Other Requirements

A. Students are required to attend the departmental and college seminars during the spring and fall semesters. Students are also required to enroll in a minimum of 9 credit hours during the spring and fall semesters.

B. Students are required to achieve a working knowledge of methods, programming, and applications of computers as used in biostatistics and epidemiology. This knowledge may be acquired by formal class work or by experience acquired either before entering or during the course of the program.

C. Students are required to achieve a general understanding of the biological sciences as they relate to human health and disease. This requirement may be satisfied in one or more areas. Any course work needed to satisfy this requirement may be taken at this or another institution, either before or after entering the program.

D. Tools of research are required. The purpose of the research tool is to increase research proficiency by developing competence in those skills necessary for successful research performance. Such skills might include formal computer, research, or other courses that enhance the student's ability to gather and analyze large data sets.

E. Students must pass a general written and oral examination. A student must complete the defense of the dissertation within five (5) years of the end of the semester within which the General Examination was successfully completed. If the time expires before the dissertation is completed, the course work must be revalidated by retaking and passing the General Examination.

This degree program is subject to the policies and procedures printed in the University of Oklahoma College of Public Health Bulletin.

5/14/07