

**AREA OF CONCENTRATION IN BIostatISTICS
MAJOR WORKSHEET 2005-2007**

Students wishing to pursue this area of concentration must complete an application available at the following website: http://www.morris.umn.edu/services/acad_affairs/aavarious.html#areaconcentration . Attach the worksheet below to the application for Area of Concentration. Required signatures must be provided on the Area of Concentration form.

Objectives – Students should have the ability to:

- a) Apply statistical methods to various health problems such as diseases and the evaluation of health polities
- b) Develop statistical models to aid in the understanding of biological processes
- c) Develop a general understanding of biological principles

Minimum required credits = 56

Required Courses:	Credits	Term
Biol 1101 Freshman Seminar in Biological Principles	3	_____
Biol 2101 Evolution of Biodiversity	4	_____
Biol 2111 Cell Biology	4	_____
Biol 3101 Genetics	4	_____
Biol 3121 Molecular Biology	5	_____
Math 1101 Calculus I	5	_____
Math 1102 Calculus II	5	_____
Math 2111 Linear Algebra	4	_____
Stat 1601 Introduction to Statistics	4	_____
<i>or</i>		
Stat 2601 Statistical Methods	4	_____
Math/Stat 2501 Probability and Stochastic Processes	4	_____
Stat 2611 Mathematical Statistics	4	_____
Stat 3601 Data Analysis	4	_____
Stat 4601 Biostatistics	4	_____
Stat 4901 Senior Seminar	1	_____
Elective: one additional course from:		
Stat 3611 Multivariate Statistical Analysis	4	_____
Stat x993 Directed Study in Statistics	1-4	_____

See Sample Four-Year Plan on Reverse

Sample Four Year Plan Area of Concentration in Biostatistics

Year	Fall	Spring
One	Biol 1101 Biological Principles (Sci) 3 Engl 1011 College Writing (CW) 4 IS 1001 First Year Seminar (FYS) 2 Math 1101 Calculus I (M/SR) <u>5</u> Credits this term = 14	Biol 2102 Evolution of Biodiversity (Sci-L) 4 Math 1102 Calculus II 5 GenEd elective (Hum) 4 GenEd elective (ArtP) <u>1-3</u> Credits this term = 14
Two	Biol 2111 Cell Biology 4 Foreign Language I 4 Math 2111 Linear Algebra 4 Stat 1601 Introduction to Statistics <u>4</u> Credits this term = 16	Biol 3101 Genetics 4 Foreign Language II (FL) 4 GenEd elective (FA) 4 GenEd elective (SS) <u>4</u> Credits this term = 16
Three	Stat 2501 Probability/Stochastic Processes 4 Stat 3601 Data Analysis 4 GenEd elective (Hist) 4 Elective <u>4</u> Credits this term = 16	Biol 3121 Molecular Biology 5 Stat 2611 Mathematical Statistics 4 Stat 4601 Biostatistics 4 GenEd elective (Global Village) <u>4</u> Credits this term = 17
Four	Stat 3611 Multivariate Stat Analysis 4 Stat 4901 Senior Seminar 1 GenEd elective (Global Village) 4 Elective <u>4</u> Credits this term = 13	Stat elective 4 Elective 4 Elective 4 Elective <u>2</u> Credits this term = 14