REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MATHEMATICS/MASTER OF SCIENCE
COLLEGE OF ARTS AND SCIENCES AND OU HEALTH SCIENCES CENTER
THE UNIVERSITY OF OKLAHOMA

For Students Entering the Oklahoma State System for Higher Education:

Summer 2008 through Spring 2009

Minimum Credit Hours and Grade Point Averages Required			
Total Hours —	**136**	Upper-Division Within Total	**57**
Major Hours —	**39**		

Grade Point Averages:

Overall & Major: Combined OU/Transfer - **3.00** OU - **3.00**

48 Upper-Division Hours REQUIRED

Mathematics & Biostatistics

1701L
Bachelor of Science in Mathematics/Master of Science

OU encourages students to complete at least 28 hours of applicable coursework each year to have the opportunity to graduate in five years.

No more than 8 hours may carry a grade lower than B. No course at the 4000-level or higher with a grade lower than C may be applied to the program.

GENERAL EDUCATION AND COLLEGE REQUIREMENTS
Courses graded P/NP will not apply.

Courses for fulfillment of General Education and College of Arts & Sciences requirements must be from the approved General Education course list published in the Class Schedule or at **http://www.ou.edu/admrec/gened.htm.**

University-Wide General Education (minimum 40 hours) and College of Arts and Sciences Requirements

Core Area I: Symbolic and Oral Communication (9-22 hours, 3-6 courses)

a. **English Composition** (6 hours, 2 courses)
1. English 1113, Principles of English Composition
2. English 1213, Principles of English Composition, **or** EXPO 1213, Expository Writing

b. **Foreign Language** (0-13 hours in the same language)
The College of Arts and Sciences requirement ***cannot be met by high school coursework***.
1. Beginning Course (0-5 hours) _____
2. Beginning Course, continued (0-5 hours) _____
♦ 3. Intermediate Course (2000 level, 0-3 hours). _____
One course at the intermediate level or demonstrated competency at that level.

c. **Mathematics** (3 hours, 1 course). _____

Core Area II: Natural Science (7 hours, 2 courses) including one laboratory component.

♦ 1. **Biological Science** _____
Chosen from the following approved General Education designators: BOT, HES, MBIO, or ZOO.

♦ 2. **Physical Science** _____
Chosen from the following approved General Education designators: AGSC, ASTR, CHEM, GEOG, GEOL, GPHY, METR, or PHYS.

Core Area III: Social Science (6 hours, 2 courses)

1. Political Science 1113, American Federal Government
2. _____

Core Area IV: Humanities (18 hours, 6 courses)

a: **Understanding Artistic Forms** (3 hours, 1 course) _____

b. **Western Civilization and Culture** (6 hours, 2 courses)
1. History 1483, U.S., 1492-1865, **or** History 1493, U.S., 1865-Present,
2. _____ (excluding HIST 1483 and 1493)

c. **Non-Western Culture** (3 hours, 1 course):_____

d. **Additional Core IV Humanities courses** (6 upper-division hours, 2 courses at the 3000- 4000-level). Must be outside the major and selected from Understanding Artistic Forms, Western Civilization and Culture, or Non-Western Culture.

♦ 1. _____

♦ 2. _____

Core Area V: Senior Capstone Experience (3 hours, 1 course): _____

♦ College of Arts and Sciences Requirements: College requirements are not automatically fulfilled by a previous degree.

Computer Literacy Requirement — Students must demonstrate computer proficiency which includes the competent use of a variety of software and networking applications. This requirement may be satisfied by:
1. A high school computer science course that meets curricular requirement; **or**
2. Completion of a college-level course that requires competent use of computing; **or**
3. Completion of a university computer proficiency assessment test.

Some courses required for the major may also fulfill University General Education and/or College of Arts & Sciences Requirements

MAJOR REQUIREMENTS

MATH:

1823	Calculus & Analytic Geometry I	3
2423	Calculus & Analytic Geometry II	3
2433	Calculus & Analytic Geometry III	3
2443	Calculus & Analytic Geometry IV	3
2513	Discrete Mathematical Structures	3
3333	Linear Algebra I	3
4073	Numerical Analysis I	3

One of the following:

3113	Intro. to Ord. Diff. Equations, **or**	3
3413	Physical Mathematics I	

One of the following:

4323	Intro. to Abstract Algebra I
4383	Applied Modern Algebra
4433	Intro. to Analysis I

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One of the following:*

4733	Math. Theory of Probability, **or**	3
BSE 5703	Theory of Probability	

One of the following:*

4743	Intro. to Math. Statistics, **or**	3
BSE 5733	Princ. of Math. Stat. I	

Six additional hours of math chosen in consultation with adviser from the following: 4083, 4113, 4193, 4323, 4333, 4373, 4433, 4443, 4753, 4853, 4793 or BSE 6663, 4773 or BSE 6643, BSE 5653.

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*No student may earn credit for both 4733 and BSE 5703, or 4743 and BSE 5733.

Major Support Requirements

One of the following:		4-5
ZOO 2124	Human Physiology **or**	
MBIO 2815	Intro. to Microbiology (lab)	

Free Electives

A minimum of 16 hours must be chosen in consultation with adviser. 16

BS and MS REQUIREMENTS

BIOSTATISTICS & EPIDEMIOLOGY:

BSE 5001	Problems in Biostatistics & Epid.	1
BSE 5113	Principles of Epidemiology	3
BSE 5163	Biostatistical Methods I	3
BSE 5173	Biostatistical Methods II	3
BSE 5193	Intermediate Epidemiologic Methods	3
BSE 5980	Research for Master's Thesis	3

NOTE: The master's thesis also satisfies the senior capstone requirement for the bachelor's degree. No more than three hours earned of BSE 5980 may be applied toward the dual degree program.

One of the following:

HAP	5113	Health Organiz. & Admin.
HPS	5213	Social & Behavioral Sciences in Public Health
OEH	5013	Environmental Health

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Six additional hours of math chosen in consultation with adviser from the following: 4083, 4113, 4193, 4323, 4333, 4373, 4433, 4443, 4853, 5793 or BSE 6663, 5773 or BSE 6643, BSE 5653. These courses may not duplicate the six hours of math electives for the undergraduate major requirements and when offered on a slashlisted basis must be the graduate-level course.

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Additional Graduate Requirements

Epidemiology elective chosen from:

BSE 5303	Epidem. of Infectious Disease	
BSE 5363	Epidemiology & Prevention of Chronic Disease	
BSE 6363	Cancer Epidem. & Prevention	

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Six hours of math or biostatistics chosen in consultation with adviser from the following: MATH 5783 or BSE 5653, BSE 5663, BSE 6643, MATH 5793 or BSE 6663.

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BSE elective chosen from any BSE course (excluding 5103, 5950, and 6950) that has not been taken to fulfill other requirements.

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INFORMATION CONCERNING GENERAL RULES, REGULATIONS AND MINIMUM REQUIREMENTS

TOTAL HOURS: A minimum of 120 semester hours acceptable toward graduation must be completed.

UPPER-DIVISION HOURS: A minimum of 48 upper-division semester hours acceptable toward graduation must be completed. OU courses numbered 3000 or above are upper-division. Transfer work is counted as lower-division or upper-division credit depending on the level at which it was offered at the institution where it was earned. Two-year college work is accepted only as lower-division credit.

ARTS AND SCIENCES HOURS: At least 80 semester hours of liberal arts and sciences courses are required for a BA degree. At least 55 semester hours of liberal arts and sciences courses are required for a BS degree.

MAJOR WORK: A minimum of 30 semester hours must be earned in the major, including a minimum of 15 credit hours at the upper-division level.

PASS/NO PASS ENROLLMENT: A maximum of 16 semester hours of free elective credit may be attempted under this option.

INDIVIDUAL STUDIES (e.g., courses titled "Independent Study"): A maximum of 12 total semester hours may be counted toward graduation, excluding Honors Reading and Honors Research.

MILITARY, MILITARY IN-SERVICE, SKILLS, APPLIED TECHNOLOGY, AND P.E. COURSES: A maximum of 16 semester credit hours of basic skills and/or applied technology courses. No physical education activity courses will be counted toward the 120 semester hours of acceptable credit for graduation.

SENIOR INSTITUTION HOURS: A minimum of 60 semester hours applied toward graduation must be earned at senior (4-year) institutions.

RESIDENCY:

- At least 15 of the final 30 hours applied toward the degree or at least 50 percent of the hours required by the institution in the major field must be satisfactorily completed at the awarding institution.
- At least 15 semester hours of upper-division major work must be completed in residence at OU.
- OU correspondence courses are ***not*** considered resident credit.
- Credits earned via examination are neither resident nor nonresident credit.

GRADE POINT AVERAGES: Students must earn a minimum overall 2.00 for each of the following: Combined Retention GPA (all college grades), OU Retention GPA, GPA for all major courses, and GPA for all major courses taken at OU. Some schools and departments of the College have higher minimum grade point averages required for their students.

SPECIAL DEGREES: Students may qualify for an Honors degree (cum Laude, Magna cum Laude, or Summa cum Laude) by completing specific requirements of the Honors College. A degree will be earned with Distinction if the student completes at least 60 semester hours at OU with at least a 3.60 combined retention GPA and OU retention GPA. A degree will be earned with Special Distinction if the student completes at least 60 semester hours at OU with at least a 3.90 combined retention GPA and OU retention GPA.

APPLICATION FOR GRADUATION: Students must apply for graduation during the term in which they complete their degree requirements in order to graduate in that term. The application is valid for three terms. Application forms are available from the College of Arts and Sciences Academic Services office, Ellison Hall, Room 124. The deadline for completion of all coursework to graduate in a particular term is the last day of classes in that term.

Refer to the OU General Catalog for more complete information.

GRADUATION PLAN			
Freshman Year	**Sophomore Year**	**Junior Year**	**Senior Year**
			Total Hours _____ Upper-Division _____