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## Master of Science in Biostatistics-Decision Science

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Website: <http://louisville.edu/sphis/bb/academics.html>

The M.S. biostatistics-decision science is a 36 credit-hour program including the thesis. Additional hours may be needed for completion of the concentration program.

### Coursework

36 total credit-hours of required coursework  
24 credit-hours of core coursework  
3-6 credit-hours of concentration coursework  
6-9 credit-hours of thesis research

<b>Required Coursework</b>			
<b>Semester</b>	<b>Course #</b>	<b>Course Title</b>	<b>Credit - Hours</b>
Fall I	PHEP-501	Introduction to Epidemiology	3
	PHST-661	Probability	3
	PHST-680	Biostatistical Methods I	3
	Semester Total		9
Spring I	PHST-662	Mathematical Statistics	3
	PHST-681	Biostatistical Methods II	3
		Elective course	3
	Semester Total		9
Fall II	PHST-602	Biostatistics-Decision Science Seminar	1
	PHCI-624	Clinical Trials I	2
		Concentration course	3
		Concentration course	3
	Semester Total		9
Spring II	PHST-602	Biostatistics-Decision Science Seminar	1
	PHDA-603	Public Health Practicum I	2
		Concentration course(s)	6
	Semester Total		9
Degree Total			36

### Electives

An elective course must be chosen from the following list or as approved by student's faculty advisor.

<b>Electives</b>		
<b>Course #</b>	<b>Course Title</b>	<b>Credit - Hours</b>
MATH 566	Nonparametric Statistics	3
PHCI 605	Survey Research Methods	3
PHCI 622	Case-Control Studies	3
PHCI 623	Cohort Studies	3
PHBI 750	Statistical Methods for Bioinformatics	3
PHEH 600	Introduction to Environmental Health	3

Biostatistics Concentration

Coursework

<b>Biostatistics Concentration Coursework</b>			
<b>Semester</b>	<b>Course #</b>	<b>Course Title</b>	<b>Credit - Hours</b>
Fall II	PHST-683	Survival Analysis	3
	PHDA-666	Master's Thesis Research	3
	Semester Total		6
Spring II	PHST-684	Categorical Data Analysis	3
	PHDA-666	Master's Thesis Research	3
	Semester Total		6
Concentration Total			12

Decision Science Concentration

Coursework

<b>Decision Science Concentration Coursework</b>			
<b>Semester</b>	<b>Course #</b>	<b>Course Title</b>	<b>Credit - Hours</b>
Fall II	PHDA-663	Analysis for Decision Making (cross-listed with IE-643)	3
	PHDA-666	Master's Thesis Research	3
	Semester Total		6
Spring II	PHDA-666	Master's Thesis Research	6
Concentration Total			12

Thesis

To successfully complete the M.S. degree, each student must successfully defend a master's thesis on a topic approved by his or her major professor and thesis committee.

*Thesis Committee*

Students choose a principal advisor (major professor) and at least two other committee members. One member of thesis committee must be from allied

department in the university. The committee is appointed by the dean of the school upon the recommendation of the program director.

### *Thesis Preparation*

The thesis is to be prepared in format and binding according to the guidelines established by the School of Interdisciplinary and Graduate Studies (SIGS), available at <https://graduate.louisville.edu/pubs/theses-dissertations>.

### *Thesis Approval*

The thesis is to be submitted in completed form to the chair of the thesis committee at least fifteen days before the end of the term in which the candidate expects to be graduated, and the candidate is not eligible for the final oral examination until the thesis has been accepted by the committee.

The thesis committee schedules an oral examination of the candidate, which all faculty and students of the department are invited to attend. This defense is scheduled at the convenience of the members of the thesis committee. The thesis is approved by a majority vote of the committee.

### *Thesis Distribution*

One unbound copy of the thesis, signed by the thesis committee, must be deposited with SIGS before graduation. A copy of the final, signed thesis must also be deposited with the department office.