

# Biomathematics (PhD)

## Degree Requirements

Students may choose from the degree tracks below to complete coursework within a focus area.

**Degrees earned will be distributed as: "Doctor of Philosophy in Biomathematics" without track specifications.**

Code	Title	Hours
<b>Required Courses</b>		<b>15</b>
BMA 771	Biomathematics I	
BMA 772	Biomathematics II: Stochastic Models in Biology	
BMA 773	Stochastic Modeling	
BMA 774	Partial Differential Equation Modeling in Biology	
BMA 801	Seminar <sup>1</sup>	
<b>Biological Sciences Courses</b>		<b>9</b>
"Biological Science Courses" will be approved in conjunction with the academic committee <sup>2</sup>		
<b>Statistics Courses</b>		<b>3-6</b>
Required "Statistics Courses" will be approved in conjunction with the academic committee – see "Statistic Course Options" listed below		
<b>Mathematical Science Courses</b>		<b>9</b>
"Mathematical Science Courses" will be approved in conjunction with the academic committee		
<b>Focus Area Track</b>		<b>15</b>
See "Focus Area Tracks" <sup>3</sup>		
<b>Total Hours</b>		<b>51-54</b>

<sup>1</sup> BMA 801 Seminar needs to be repeated three times to meet the three credit hour requirement.

<sup>2</sup> Must represent at least two different perspectives.

<sup>3</sup> Must include at least one 700 level course.

## Statistic Course Options

### Option 1

Code	Title	Hours
ST 511	Statistical Methods For Researchers I	3
ST 512	Statistical Methods For Researchers II	3
<b>Total Hours</b>		<b>6</b>

### Option 2

Code	Title	Hours
<b>Option Two</b>		
ST 512	Statistical Methods For Researchers II (R)	3
<b>Total Hours</b>		<b>3</b>

## Focus Track Areas

### Biological Sciences

Code	Title	Hours
<b>Select five courses, minimum of one from each of the following:</b>		<b>15</b>
	Cellular and Molecular Biology	

Genetics and Development

Biophysical and Biomedical Sciences and Physiology

Ecology and Evolution

**Total Hours** **15**

## Mathematical Methods

Code	Title	Hours
<b>Select five courses in the following or co-major:</b>		<b>15</b>
	Mathematics	
	Statistics	
	Operations Research	
	Computer Studies	
<b>Total Hours</b>		<b>15</b>

## Faculty

### Full Professors

Kevin Gross

Mansoor Abbas Haider

Carol K. Hall

Jason M. Haugh

George R. Hess

Alun L. Lloyd

Sharon R. Lubkin

Spencer V. Muse

Mette Olufsen

Brian J. Reich

Seth M. Sullivant

Jeffrey L. Thorne

Hien Trong Tran

Zhaobang Zeng

### Associate Professors

Gavin Clay Conant

Randall Brian Langerhans

Cristina Lanzas

Gustavo Machado

Charles Eugene Smith

Rosangela Sozzani

## **Assistant Professors**

Belinda Sena Akpa

Zixuan Cang

Jie Cao

Kevin Bryant Flores

David Alan Rasmussen

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## **Emeritus Faculty**

William Reid Atchley

John William Bishir

Marlene L. Hauck

Gail G. McRae

Kenneth Hugh Pollock

Jim E. Riviere

Henry E. Schaffer

James Francis Selgrade

Ronald Edwin Stinner

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## **Adjunct Faculty**

John Edward Banks

Georgiy Bobashev

Brian Ernest Carlson

James W. Gilliam

Nicholas M. Haddad

Thomas D. Husmeier

Dustin Kapraun

Julia S. Kimbell

W. Owen McMillan III

Suzanne Marie Lenhart

Johnny T. Ottesen

Charles Puelz

Eric A. Stone