APPLIED MATHEMATICS

Department of Mathematics (https://cas.umw.edu/math/)

The minor in applied mathematics is designed to give students the opportunity to complement their degree with a computational component. The minor offers a more concentrated applied curriculum and, more importantly, recognition for students working in areas where applications of mathematics have seen a greater presence in recent years. This includes, in particular, the natural sciences such as physics, chemistry, geology, and biology, but also computer science, economics, and business, where mathematical modeling has become very important. Adding the applied mathematics minor to such a degree will give students the more specific recognition for their course work, thereby enhancing their resume.

Debra L. Hydorn
Janusz Konieczny
Jangwoon Lee
J. Larry Lehman
Keith E. Mellinger
Suzanne Sumner

Associate Professors
Melody B. Denhere
Randall D. Helmstutler

Senior Lecturers
Jennifer M. Magee
Kelly W. Perkins

Minor Requirements

Code	Title	Credits
MATH 122	Calculus II	4
MATH 312	Differential Equations	3
Select 9 credits of the following:		9
MATH 300	Linear Algebra	
MATH 351A	Numerical Analysis I	
MATH 352A	Numerical Analysis II	
MATH 411	Chaotic Dynamical Systems	
MATH 421	Applied Partial Differential Equations	
STAT 381	Probability and Statistical Inference	
STAT 382	Probability and Statistical Inference	
MATH 361	Topics in Mathematics [1]	
or STAT 361	Topics in Statistics	
MATH 461	Topics in Mathematics [1]	
or STAT 461	Topics in Statistics	
MATH 491B	Directed Study [1,2]	1-3
MATH 492A	Directed Study [1]	1-3
Select 3 credits of the following:		3
Any course in the additional upper level list above		
MATH 224A	Multivariable Calculus	
STAT 280	Statistical Methods	
CPSC 220	Computer Programming and Problem Solving	
Any 300/400 level course in a related discipline with mathematics department approval		
Total Credits		**21-25**

[1] With departmental approval.

[2] At most three credits of MATH 491B Directed Study or STAT 491 Directed Study may be counted toward the applied mathematics minor.

Mathematics Faculty

Julius N. Esunge, Chair
Randall D. Helmstutler, Career Advisor for Pure Mathematics
Jangwoon Lee, Career Advisor for Applied Mathematics
Debra L. Hydorn, Career Advisor for Statistics

Professors

Julius N. Esunge