

Sample 4-year Degree Plan for

Bachelor of Science in Mathematics

Applied Mathematics Concentration

Last Revised 2023-2024

This is ONLY a sample degree plan. Please meet with your academic advisor prior to registration to formulate your own plan, and for additional information refer to the academic catalog.

*If you were placed into introductory Writing and/or Mathematics courses based on your placement and/or test scores, please consult with your academic advisor to develop a degree plan.

Year	Fall Semester		Spring Semester	
	MATH 2214 Calculus 1 (GE QA&SR)	3	MATH 2215 Calculus 2	3
	CSCI 2911 Computer Science 1	3	MATH 3301 Discrete Mathematics	3
	CSCI 2916 Computer Science 1 Lab	1	CSCI 2912 Computer Science 2	3
1st	GE WC&IL 1	3	GE WC &IL 2	3
150	CHEM 2050 General Chemistry 1 (GE NW)	3	Unrestricted Elective	3
	CHEM 2051 General Chemistry 1 Lab	1		
	Total Credits	14	Total Credits	15

Year	Fall Semester		Spring Semester	
	MATH 2216 Calculus 3	3	MATH 3307 Differential Equations	3
	MATH 3305 Linear Algebra	3	GE H&P	3
	PHYS 2050 General Physics 1	3	GE CA	3
2nd	PHYS 2051 General Physics 1 Lab	1	Unrestricted Elective	3
2110	CSCI 2913 Data Structures	3	Unrestricted Elective	3
	Unrestricted Elective	3		
	Total Credits	16	Total Credits	15

Year	Fall Semester		Spring Semester	
	MATH 3000 Proof Writing in Mathematics	3	MATH 3470 Applied Statistics	3
	MATH 3500 Numerical Methods	2	CSCI 3302 Machine Learning & Knowledge	3
		3	Discovery	3
3rd	GE AE	3	GE T&I	3
314	GE T&M	3	GE GC&D	3
	CSCI 3242 Modeling and Simulation	3	Unrestricted Elective	3
	Total Credits	15	Total Credits	15

Year	Fall Semester		Spring Semester	
	MATH 4470 Partial Differential Equations	2	MATH 4471 Applications of Differential	3
		3	Equations	3
	GE SW	3	GE CT&E	3
4th	Upper-Division Elective	3	Upper-Division Elective	3
1011	Unrestricted Elective	3	Unrestricted Elective	3
	Unrestricted Elective	3	Unrestricted Elective	3
	Total Credits	15	Total Credits	15

^{**}This schedule is <u>only a suggestion</u>; make sure you understand the necessary prerequisites for each course and consult with your Academic Advisor. Course availability subject to change; actual degree audits may change depending on course availability in a given semester.

Baccalaureate Requirements

- Total Degree Credits Required = 120 credits of which a minimum of 36 are Upper-Division Credits (level 3000 and above)
- Completion of Major Requirements (as indicated above)
- Completion of General Education Requirements (as indicated above)
- Cumulative GPA of at least 2.0; Major GPA of at least 2.0
- Residency Requirements: 12 credits of major course work and 24 of the last 30 credits immediately preceding graduation (Service member's Opportunity College students please see your academic advisor)

For more information on our General Education curriculum please refer to our Academic Catalog or visit: https://www.hpu.edu/gen-ed/index.html



Sample 4-year Degree Plan for

Bachelor of Science in Mathematics

Applied Mathematics Concentration (Biology Focus)

Last Revised 2023-2024

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Year	Fall Semester		Spring Semester	
	MATH 2214 Calculus 1 (GE QA&SR)	3	MATH 2215 Calculus 2	3
	CSCI 2911 Computer Science 1	3	MATH 3301 Discrete Mathematics	3
	CSCI 2916 Computer Science 1 Lab	1	BIOL 2052 General Biology 2	4
1st	GE WC&IL 1	3	BIOL 2053 General Biology 2 Lab	1
	BIOL 2050 General Biology 1	4	GE WC &IL 2	3
	BIOL General Biology 1 Lab	1		
	Total Credits	15	Total Credits	14

Year	Fall Semester		Spring Semester	
	MATH 2216 Calculus 3	3	MATH 3307 Differential Equations	3
	MATH 3305 Linear Algebra	3	CSCI 2912 Computer Science 2	3
	CHEM 2050 General Chemistry 1 (GE NW)	3	GE H&P	3
2nd	CHEM 2051 General Chemistry 1 Lab	1	GE CA	3
	GE AE	3	Unrestricted Elective	3
	Unrestricted Elective	3		
	Total Credits	16	Total Credits	15

Year	Fall Semester		Spring Semester	
	MATH 3000 Proof Writing in Mathematics	3	MATH 3470 Applied Statistics	3
	MATH 3500 Numerical Methods	3	BIOL 3080 Ecology	3
2 1	BIOL 3170 Cell and Molecular Biology	3	GE T&I	3
3rd	GE T&M	3	GE GC&D	3
	Unrestricted Elective	3	Unrestricted Elective	3
	Total Credits	15	Total Credits	15

Year	Fall Semester		Spring Semester	
	MATH 4470 Partial Differential Equations	3	MATH 4471 Applications of Differential	3
		3	Equations	3
	GE SW	3	GE CT&E	3
4th	Upper-Division Elective	3	Upper-Division Elective	3
. • • • •	Unrestricted Elective	3	Unrestricted Elective	3
	Unrestricted Elective	3	Unrestricted Elective	3
	Total Credits	15	Total Credits	15

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Sample 4-year Degree Plan for

Bachelor of Science in Mathematics

Applied Mathematics Concentration (Biostatistics Focus) Last Revised 2023-2024

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Year	Fall Semester		Spring Semester	
	MATH 1123 Statistics	3	MATH 2214 Calculus 1 (GE QA&SR)	3
	CSCI 2911 Computer Science 1	3	MATH 3301 Discrete Mathematics	3
	CSCI 2916 Computer Science 1 Lab	1	BIOL 2052 General Biology 2	4
1st	GE WC&IL 1	3	BIOL 2053 General Biology 2 Lab	1
	BIOL 2050 General Biology 1 (GE NW)	4	GE WC &IL 2	3
	BIOL General Biology 1 Lab	1	Unrestricted Elective	3
	Total Credits	15	Total Credits	17

Year	Fall Semester		Spring Semester	
	MATH 2215 Calculus 2	3	MATH 2216 Calculus 3	3
	MATH 3305 Linear Algebra	3	MATH 3307 Differential Equations	3
2.0.1	MATH 3000 Proof Writing in Mathematics	3	GE H&P	3
2nd	BIOL 3090 Biometry	3	GE CA	3
	GE AE	3	CSCI 2912 Computer Science 2	3
	Total Credits	15	Total Credits	15

Year	Fall Semester		Spring Semester	
	MATH 3460 Probability	3	MATH 3470 Applied Statistics	3
	MATH 3500 Numerical Methods	3	GE T&I	3
2 1	GE T&M	3	GE GC&D	3
3rd	Unrestricted Elective	3	Unrestricted Elective	3
	Unrestricted Elective	3	Unrestricted Elective	3
	Total Credits	15	Total Credits	15

Year	Fall Semester		Spring Semester	
	GE SW	3	MATH 3600 Mathematics for Data Science	3
	Upper-Division Elective	3	GE CT&E	3
4th	Upper-Division Elective	3	Upper-Division Elective	3
4tm	Unrestricted Elective	3	Unrestricted Elective	3
	Unrestricted Elective	3	Unrestricted Elective	3
	Total Credits	15	Total Credits	15

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