

La Roche University
MATHEMATICS PROGRAM GUIDE
 DEGREE: Bachelor of Arts Department: Mathematics

Student Name _____ First Year Student Transfer
 I.D. Number _____ Change of Major Readmit

Unofficial Eval Completed by/date: _____

This is the **unofficial evaluation** of your credits to date including transfer credits (if applicable) in your chosen major. **This evaluation is official when all official transcripts for all previous university work are received; and reviewed and approved for transferability by the Registrar's Office.** Beginning with your first semester of enrollment, your Degree Audit Report in My.LaRoche will automatically track your progress toward your degree, and guide you in planning future class schedules. Review your updated Degree Audit Report with your advisor prior to registering each semester.

PURPOSE: The major in Mathematics introduces students to a field whose origins date from the dawn of history and whose ever-increasing pervasiveness and importance in science, engineering, business and finance renders it a veritable master-key to our understanding of the world about us. The degree in mathematics opens many doors to students upon graduation, to a job in business, industry or government, to certification as a teacher, to graduate study in mathematics, statistics, and computer science, among many other fields, or to a professional school such as in business or law. Moreover, the major in mathematics serves as a gateway not only to a job and career, but also to a world where logic and imagination combine to create timeless beauty and truth.

REQUIREMENTS: To successfully complete the Mathematics major, the following coursework is required:

- 54 credits as listed under "Major Component/Requirements" (46 in Mathematics and 8 in Physics)
- 37 CORE credits
- 29 General Elective Credits
- A minimum number of 120 credits are required for degree, the last 30 of which, and 50% of the major must be earned at La Roche University. (Developmental course work does not count toward the minimum number of required credits for graduation.)

MAJOR COMPONENT/REQUIREMENTS: 54 CREDITS

Mathematics Component	Credits	Transfer Course #/Comments
_____ MATH1032 Analytic Geometry & Calculus I	4	Prereqs: MATH1010 or equivalent, MATH1023 or equivalent
_____ MATH1033 Analytic Geometry & Calculus II	4	Prerequisite: MATH1032
_____ MATH2030 Analytic Geometry & Calculus III	4	Prerequisite: MATH1033
_____ MATH2031 Ordinary Differential Equations	3	Prerequisite: MATH2030
_____ MATH2050 Discrete Mathematics I	3	Prerequisite: MATH1033
_____ MATH2051 Discrete Mathematics II	3	Prereq: MATH2050
_____ MATH3015 Linear Algebra	3	Prerequisite: MATH2030
_____ MATH3035 Complex Variables	3	Prerequisite: MATH2031
_____ MATH3040 Probability & Statistics I	3	Pre- or Co- requisite: MATH2030
_____ MATH3045 Probability & Statistics II	3	Prerequisite: MATH3040
_____ MATH4003 History of Mathematics	3	Prerequisite: MATH2031
_____ MATH4015 Modern Abstract Algebra	3	Prerequisite: MATH2031; Co-requisite: MATH3015
_____ MATH4020 Geometry	3	Prerequisite: MATH2031
_____ MATH4035 Real Analysis	3	Prerequisite: MATH2031
_____ MATH4090 Junior-Senior Seminar	1	Prerequisite: Junior/Senior Status
<u>Physics Component</u>		
_____ PHYS1032 General Physics I	3	Recommended prerequisite: MATH1033
_____ PHYS1032L General Physics I Lab	1	The lab component of PHYS1032
_____ PHYS1033 General Physics II	3	Prerequisite: PHYS1032; recommended prerequisite: MATH2030
_____ PHYS1033L General Physics II Lab	1	The lab component of PHYS1033

ACADEMIC CORE CURRICULUM – 37 Credits

		<u>Credits</u>	<u>Transfer Course # / Comments</u>
<u>Foundations of Knowledge: 15 credits</u>			
_____	ENGL1011 Academic Reading and Writing	3	_____
_____	ENGL1012 Academic Writing and Research	3	_____
_____	ISTC1010 Digital Literacy	3	_____
_____	MATH1010 College Algebra	3	_____
_____	SPCH1010 Oral Communication	3	_____

<u>La Roche Experience: 4 credits</u>			
_____	LRUX1001 LRX Foundations	1	_____
_____	LRUX2500 Investigating Social Problems	3	_____

Breadth of Knowledge: 12 credits

Courses in a variety of disciplines can fulfill these requirements. Students should use the course search in the My.LaRoche schedule of classes to find courses that fulfill each area. Students must complete **PLEASE NOTE: Students are exempt from one area, based on their major.**

_____	Natural and Physical World		Fulfilled in Major _____
_____	Human Expression	3	_____
_____	Values and Ethics	3	_____
_____	Social Sciences	3	_____
_____	Global Perspectives	3	_____

Depth of Knowledge: 3 credits

_____	INQU Interdisciplinary Inquiry	3	_____
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Core Electives: 3 credits

_____	Any Breath of Knowledge Area Course –OR–	3	_____
	One additional Interdisciplinary Inquiry		

GENERAL ELECTIVES: 29 credits

General electives may be applied to the requirements of a second major, or a minor, or a certificate program, or to do an internship (MATH4051 for 1-6 credits). In the past, students have often combined a major in mathematics and a minor in either computer science or finance.

Course # Credits

_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

<i>FOR REGISTRAR USE ONLY:</i>	<u>TOTAL</u>	<u>Completed</u>	<u>Need</u>	<u>COMMENTS:</u>
Major Component	54	_____	_____	_____
CORE	37	_____	_____	_____
General Electives	29	_____	_____	_____
Accepted in Transfer	_____	_____	_____	_____
La Roche University Credit	_____	_____	_____	_____
Total	120	_____	_____	

Registrar Signature _____

Date _____