

La Roche College
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 college 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 College. (Developmental course work does not count toward the minimum number of required credits for graduation.)

	<u>Credits</u>	<u>Transfer Course #/Comments</u>
MAJOR COMPONENT/REQUIREMENTS: 54 CREDITS		
Mathematics Component		
_____ 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
Physics Component		
_____ 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

Fundamentals: 12 Credits	Credits	Transfer Course #/Comments
ENGL1011 College Writing I	3	_____
ENGL1012 College Writing II	3	Prerequisite ENGL1011
ISTC1005 Practical Computer Applications	3	_____
MATH1010 College Algebra	3	_____

La Roche Experience: 4 Credits	Credits	Transfer Course #/Comments
LRCX1001 Introduction & History	1	_____
LRCX1002 Diversity/Discrimination	1	_____
LRCX2001 Regions of Conflict	1	_____
LRCX2002 Economic Justice	1	_____

Community/Global: 6 credits (or 6 credits in same Foreign Language for majors that do not require a language)	Credits	Transfer Course #/Comments
COMM Community	3	_____
GLBL Global	3	_____

Select Courses: 15 credits

18 credits are required with study within each of the following domains. Students can fulfill six domains with four courses (earning a total of 12 credits) by completing "dual-domain" SELECT courses SLDD. Student earns 3 credits only for each dual-domain course. The "lost" 3-6 credits can be fulfilled through a major or general elective. **PLEASE NOTE: Some "Select Courses" may be filled by meeting Major Requirements and if so, will be annotated as such.**

SELECT Aesthetics (SLAE)	3	_____
SELECT History (SLHS)	3	_____
SELECT Literature (SLLT)	3	_____
SELECT Religion/Philosophy (SLRS)	3	_____
SELECT Science (SLSC)	0	Fulfilled in major
SELECT Social and Cultural Systems (SLSO)	3	_____

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.

Transfer Course #	Credits	Transfer Course #	Credits	Transfer Course #	Credits	Transfer Course #	Credits
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

FOR REGISTRAR USE ONLY:	TOTAL	Completed	Need	COMMENTS:
Major Component	54	_____	_____	_____
CORE	37	_____	_____	_____
General Electives	29	_____	_____	_____
Accepted in Transfer	_____	_____	_____	_____
La Roche College Credit	_____	_____	_____	_____
Total	120	_____	_____	_____

Registrar Signature _____ **Date** _____

Advisor Signature _____ **Date** _____
(When signed by Advisor, all required coursework/credits have been completed for graduation.)