Detailed Syllabus



Department: Mathematical,

Information and Computer Sciences

Class: MTH3052 History of

Mathematics

Number of Units: 2

Class Time/Location: TR 11:00 AM -

12:45 PM Rohr Science 295

Spring 2023

Instructor: Maria Zack, Ph.D.

Phone: 619.849.2458

Email: mzack@pointloma.edu

Office hours:

On Zoom - <u>Click here for appointment (https://calendar.google.com/calendar/selfsched?</u> sstoken=UUphMmZJc2tlVTFKfGRIZmF1bHR8YTE5OTl3YWQxZDFhZDc4MDExZWQ5ZjU3MDRhNmNkNTI)

These are the times that I work to hold open for appointments. If none of them work you can email me to see if we can find another time. Please note that some sessions are Zoom only and are shown with the statement "Zoom only" after the time. The others can be Zoom or In-Person.

Monday 11:00 AM -12:00 PM and 2:30-3:00 PM (Zoom only)

Tuesday 7:30-8:30 AM and 4:30-5:30 PM (Zoom only)

Wednesday 11:30 AM - 12:00 PM and 5:00-6:00 PM (Zoom only)

Thursday 8:30-9:30 AM (Zoom only) and 4:00-5:30 PM

Friday 10:30 AM - 12:00 PM (Zoom only)

PLNU Mission

To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Department Mission

The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

COURSE DESCRIPTION

MTH 3052 - History of Mathematics (2)

Development of mathematics from pre-Greek to recent times. Perspectives and contributions of persons from diverse cultural, ethnic, and gender groups. Impact of culture on mathematical progress.

Prerequisite(s): MTH 1044 with a grade of C- or higher or MTH 1064 with a grade of C- or higher.

COURSE LEARNING OUTCOMES

- 1. Students will be able to write proofs.
- 2. Students will be able to demonstrate facility with analytical concepts.
- 3. Students will be able to demonstrate facility with algebraic structures.
- 4. Students will be able to speak about their work with precision, clarity and organization.
- 5. Students will be able to write about their work with precision, clarity and organization.
- 6. Students will collaborate effectively in teams.
- 7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- 8. Students will be able to gather relevant information, examine information and form a conclusion based on that information.

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Elementary Number Theory by Gareth Jones and J. Mary Jones

COURSE CREDIT HOUR INFORMATION

In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, this class meets the PLNU credit hour policy for a 2 unit class delivered over fifteen weeks. Specific details about how the class meets the credit hour requirement can be provided upon request. (Based on 37.5 hours of student engagement per credit hour.)

ASSESSMENT AND GRADING

Graded Components

- Homework: Homework will be assigned daily and will be due at the start of class the Thursday of the following week. But do your homework every day or you will end up struggling.
- **Mid-Term Project**: This project will focus on the period of 200-1400 AD. You will be asked to choose a particular mathematical topic to research and present. This project will be done in groups and your presentations will be approximately 10-15 minutes and will be given in class on the day listed in the schedule.
- **Final Project:** You will be given a list of books of mathematical biographies and popular writing on mathematics. You will need to select one book, read it, write a paper on it and give a 7-10 minute presentation during the time of the final. The final is TUESDAY, FEBRUARY 28 IN CLASS.
- Late work will not be accepted without prior consent or a well-documented emergency. Up to a maximum of one homework assignment will be accepted up to 3 days late provided that consent is received from the professor before it is due. Homework assignments that are submitted late without prior consent will be recorded with a score of zero. If more than half of the homework assignments are submitted on time, then the lowest homework score will be dropped from the calculations of the homework grade.

Grading Distribution	Percent
Homework	40
Mid-Term Project	30
Final Project Paper	20
Final Project Presentation	10
Total	100

Grading Scale

Grades are based on the number of points accumulated throughout the course with the following exception. Approximate minimal percentages required to obtain a given grade are:

St	Standard Grade Scale Based on Percentages								
	A	В	С	D	F				
+		87.5- 90	77.5-80	67.5-70					
	92.5 -100	82.5-87.5	72.5-77.5	62.5 -67.5	0-60				
_	90-92.5	80-82.5	70-72.5	60-62.5					

INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

CLASS ENROLLMENT

It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

SPIRITUAL CARE

PLNU strives to be a place where students grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith.

If you have questions, a desire to meet with the chaplain, or if you have prayer requests, you can contact the <u>Office of Student Life and Formation (https://www.pointloma.edu/offices/student-lifeformation)</u>.

STATE AUTHORIZATION

State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct activities regulated by that state. In certain states outside California, Point Loma Nazarene University is not authorized to enroll online (distance education) students. If a student moves to another state after admission to the program and/or enrollment in an online course, continuation within the program and/or course will depend on whether Point Loma Nazarene University is authorized to offer distance education courses in that state. It is the student's responsibility to notify the institution of any change in his or her physical location. Refer to the map on **State Authorization** (https://www.pointloma.edu/offices/office-institutional-effectiveness-research/disclosures) to view which states allow online (distance education) outside of California.

PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See Academic Policies (https://catalog.pointloma.edu/content.php?catoid=52&navoid=2919#Academic_Honesty) for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.edu (mailto:EAC@pointloma.edu) or 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course and/or if they do not wish to utilize some or all of the elements of their AP in that course.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC.

SEXUAL MISCONDUCT AND DISCRIMINATION

Point Loma Nazarene University faculty are committed to helping create a safe learning environment for all students. If you (or someone you know) have experienced any form of sexual discrimination or misconduct, including sexual assault, dating or domestic violence, or stalking, know that help and support are available through the Title IX Office at pointloma.edu/Title-IX (http://pointloma.edu/Title-IX (http://pointloma.edu/Title-IX (https://pointloma.edu/Title-IX (<a href="htt

If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact Counseling Services at counselingservices@pointloma.edu
(mailto:counselingservices@pointloma.edu) or find a list of campus pastors at pointloma.edu/title-ix)
(http://pointloma.edu/title-ix)

PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. If the student is absent for more than 10 percent of class sessions, the faculty member will issue a written warning of de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation.

USE OF TECHNOLOGY

In order to be successful in the online or hybrid environment, you'll need to meet the minimum technology and system requirements; please refer to the <u>Technology and System Requirements</u> (https://help.pointloma.edu/TDClient/1808/Portal/KB/ArticleDet?ID=108349) information. Additionally, students are required to have headphone speakers, microphone, or webcams compatible with their

computer available to use. Please note that any course with online proctored exams require a computer with a camera (tablets are not compatible) to complete exams online.

Problems with technology do not relieve you of the responsibility of participating, turning in your

Monday	Tuesday	Wednesday	Thursday	Friday
9-Jan NO CLASSES	i 10-Jan	11-Jan	12-Jan Course Introduction Babylonian Numbers	13-Jan
16-Jar MLK DAY	n 17-Jan Egyptian Numbers Mid-Term Project Organize	18-Jan	19-Jan Chapter 1 Chapter 2	20-Jan
23-Jar	1 24-Jan Chapter 3 Mid-Term Project Proposal	25-Jan	26-Jan Chapter 4	27-Jan
30-Jar	31-Jan Chapter 5	1-Feb	2-Feb Chapter 6	3-Feb
6-Fel	7-Feb MID-TERM PRESENTATIONS Final Project Book Selection	8-Feb	9-Feb Chapter 7	10-Feb
13-Feb	14-Feb Chapter 8	15-Feb	16-Feb Chapter 9	17-Feb
20-Feb	21-Feb Chapter 10	22-Feb	23-Feb Chapter 11 Chapter 12	24-Feb
27-Feb	28-Feb FINAL PRESENTATIONS	1-Mar	28-Feb	1-Mar
4-Ma SPRING	S-Mai BREAK	6-Mar SPRING	7-Mar BREAK	8-Mar SPRING