MTH 444-1	Abstract Algebra I
Class Time	MWF 8:30 am – 9:35 am
Location	RS 14
Instructor	Jesús Jiménez, PhD
Office	RS 218
Phone	619-849-2634
Email	jjimenez@pointloma.edu
Office Hours	TH 9:30 – 11:45, F 2:30 – 4:00 or by appointment

Textbook:	A first course in abstract algebra, 7th edition, by John B. Fraleigh
Prerequisite:	MTH232, MTH242 and junior standing

Important Dates

Exam 1	Sep 28
Exam 2	Oct 26
Exam 3	Nov 16
Final Exam	Dec 14, 8:00 am – 10:00 am

Course Description:
A study of groups, rings, fields and related structures, with selected applications.

Learning Outcomes for this Course:
This is a course on theoretical mathematics. The learning outcomes are:
1. Students will be able to write proofs.
2. Students will be able to demonstrate facility with algebraic structures.
3. Students will be able to speak about their work with precision, clarity and organization.
4. Students will be able to write about their work with precision, clarity and organization.
5. Students will collaborate effectively in teams.

Course Philosophy:
Mathematics requires active participation. Participation means: asking questions, making conjectures and checking them, providing solutions to problems, sharing ideas with classmates. During class time I will participate in the same way. My advantage is that I have seen the material several times.

Attendance:
Attendance is expected at each class session. In the event of an absence you are responsible for the material covered in class and the assignments given that day.

Regular and punctual attendance at all classes in which a student is registered is considered essential to optimum academic achievement. Therefore, regular attendance and participation in each course are minimal requirements to be met. There are no allowed or excused absences except when absences are necessitated by certain university-sponsored activities and are approved in writing by the Provost. Whenever the number of accumulated absences in a class, for any cause, exceeds ten percent of the total number of class meetings, the faculty member has the option of filing a written report to the Vice Provost for Academic Administration which may result in de-enrollment, pending any resolution of the excessive absences between the faculty member and the student…If the date of de-enrollment is past the last date to withdraw from a class, the student will be assigned a grade of W or WF (no grade). There are no refunds for courses where a de-enrollment was processed." (see catalog for full text)

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.

Academic Accommodations:

While all students are expected to meet the minimum academic standards for completion of this course as established by the instructor, students with disabilities may require academic accommodations. At Point Loma Nazarene University, students requesting academic accommodations must file documentation with the Disability Resource Center (DRC), located in the Bond Academic Center. Once the student files documentation, the Disability Resource Center will contact the student's instructors and provide written recommendations for reasonable and appropriate accommodations to meet the individual needs of the student. This policy assists the university in its commitment to full compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities (ADA) Act of 1990, and ADA Amendments Act of 2008, all of which prohibit discrimination against students with disabilities and guarantees all qualified students equal access to and benefits of PLNU programs and activities.

Students with learning disabilities who may need accommodations should discuss options with the instructor during the first two weeks of class.

Academic Honesty:

The Point Loma Nazarene University community holds the highest standards of honesty and integrity in all aspects of university life. Academic honesty and integrity are strong values among faculty and students alike. Any violation of the university's commitment is a serious affront to the very nature of Point Loma's mission and purpose.

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. Such acts include plagiarism, copying of class assignments, and copying or other fraudulent behavior on examinations. For more details on PLNU's policy go to: http://www.pointloma.edu/experience/academics/catalogs/undergraduate-catalog/point-loma-education/academic-policies

A student who is caught cheating on any item of work will receive a zero on that item and may receive an "F" for the semester. See the PLNU Catalog for a further explanation of the PLNU procedures for academic dishonesty.

Final Exam: Date and Time

The final exam date and time is set by the university at the beginning of the semester and may not be changed by the instructor. Only in the case that a student is required to take three exams during the same day of finals week is an instructor authorized to change the exam date and time for that particular student.

Grading: Grades for the course will be based on homework (25%), three exams (15% each; total of 45 %), and a final exam (30%).

Homework (25%): Homework due dates will be determined during class meetings. A homework assignment is late if it is not received at the start of class on the due date. No late homework will be accepted; however the two lowest homework scores will be dropped. Please be sure that your homework is stapled together and the problems are in order. Homework will be scored on a combination of completeness and correctness. A random selection (the same for all people) of the problems will be graded on any homework assignment.

Tests (15% each) and Final Exam (30%): Tests and the Final Exam will include problems and questions over material assigned in the text, readings and handouts, as well as material presented in class.

No examination shall be missed without prior consent by me or a well documented emergency beyond your control. A score of zero will be assigned for an examination that is missed without prior consent or a well documented emergency beyond your control. The examination schedule is included in the daily schedule. I do not intend to accept excuses such as poor communication with parents, benefactors, sport team sponsors and/or travel agents.

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The Final Exam is COMPREHENSIVE.
December 14 (Friday) 2012, 8:00 am - 10:00 am

Grading Scale: Course grades will be assigned according to the following scale:

Grading Scale in percentages			
	A	B	C	D
+		(87.5, 90)	(77.5, 80)	(67.5, 70)
	[92.5, 100]	[82.5, 87.5]	[72.5, 77.5]	[62.5, 67.5]
-	[90, 92.5)	[80, 82.5)	[70, 72.5)	[60, 62.5)

Cell Phones: Turn off any cell phone, pager or things that are distracting while you are in class. Also, do not text or work on other classes while in class (to do so is disrespectful to me and your classmates) and it is not the best use of class time.

General Advice:
1. The key to success in this class is to attend lectures regularly and do your homework.
2. Read the textbook in advance. Try to stay ahead of the instructor.
3. You learn mathematics by doing it yourself.
4. You should expect to spend approximately two hours outside of class for every one hour in class working on homework and going over concepts.
5. When doing homework, please note it is normal to not be able to do every problem correct on the first attempt. Do not be discouraged, instead seek help.

Sources of Help:
1. Me. If you have questions, ask me. See office hours.
2. Other classmates. Form study groups! Work together!

Tentative Schedule: While topic order may change- the test dates will not.

Month	Monday	Tuesday	Wednesday	Thursday	Friday
August Week 1	27	28 Intro and Section 0	29 Section 0 and I.1	30	31 I.1
September Week 2	3 Labor Day (No classes)	4	5 I.2	6	7 I.2 and I.3
Week 3	10 I.3	11	12 I.4	13	14 I.5
Week 4	17 I.6	18	19 I.6 and I.7	20	21 I.7
Week 5	24 II.8	25	26 II.8	27	28 Exam 1
October Week 6	1 II.9	2	3 II.9 and II.10	4	5 II.10
Week 7	8 II.11	9	10 III.13	11	12 III.13 and III.14
Week 8	15 III.14	16	17 III.15	18	19 Fall Break (No classes)
Week 9	22 III.15	23	24 IV.18	25	26 Exam 2
Week 10	29 IV.18 and II.19	30	31 IV.19 and IV.20	1	2 IV.20 and IV.21
November Week 11	5 IV.21	6	7 IV.22	8	9 IV.23
Week 12	12 IV.23 and V.26	13	14 V.26	15	16 Exam 3
Week 13	19 V.26 and V.27	20	21 Thanksgiving Break	22	23 Thanksgiving Break
Week 14	26 V.27 and VI.29	27	28 VI.29	29	30 VI.30 and VI.31
December Week 15	3 VI.31	4	5 VI.32	6	7 VI.32 and VI.33
Week 16	10	11	12	13	14 Final Exam (8:00 am - 10:00 am)

Homework

Section	Problems	Section	Problems
0	25,26,29,30,36 a	III.15	3-6,14,27,30,31,34-36,40-42
I.1	4-10,13,14,19,31,34,35,37	IV.18	1-6,10-12,16-19,27,28,38,41,44,46,49
I.2	1-4,8,9,13,14,15,19,20,21,24,36,37	IV.19	1-4,8-10,29
I.3	1, 3,4,6,8,10,12,13,21,22,26,27	IV.20	1-10,16,17,27
I.4	2,4,7,8,10, 22,23,29,32,40,41	IV.21	1,2,4,12,17
I.5	4,12,13,22,26,27,30,31,36,37,39,41,43,47,52-54	IV.22	1-16,24,25,27
I.6	14-16,22,23,30,32,33-37,44-46,56	IV.23	1-4,16,17,18-22,28,29,34,35,36
I.7	2-6	V.26	3,9,1214,19,20,22,29-31,34
II.8	1-9,11,12,16,17,21,24,25,44,48-50	V.27	1-14,18,19,2428
II.9	2-4,10-13,36,37	VI.29	1,2,5,7,8,11-14,17,18,27,30,36,37
II.10	2-5, 26-29,39,43,45,46	VI.30	1,4-8,16-20,24-27
II.11	1-6,14,15,16,21,22,24,47,53	VI.31	1-12,23,25,26,27,29-31
III.13	1-5,18-21,33,34,42,43,47-51	VI.32	4-6,8
III.14	1-5,10-12,21-24,27,30,31,34,35,37	VI.33	1-6,10