



Nature of Math MATH 120 Fall 2009



Instructor: Matthew Weathers
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Class web site: <http://math.biola.edu/math120> (*Syllabus and general info*)

Blackboard site: <http://biola.blackboard.com> (*Online grades, announcements*)

The class web site will have all relevant information and instructions, with links to other things you need. I also use BUBBS as a way of making class announcements and sending reminders.

My contact information:

By e-mail: Matthew Weathers on BUBBS (or Matthew.Weathers@biola.edu)
By Phone: Cell phone: (562) 322-7427 (*Okay to call any time, I turn off ringer at night*)
Biola ext. 3277 or (562) 944-0351, ext. 3277 (*My Biola office*)
Math Department secretary: Biola ext. 4741 or (562) 903-4741
Office: White 48A, Math Department, McNally. My office is in White 49.

Lectures: Mon. and Wed.: 1:30–2:45 p.m. and 3:00–4:15 p.m., Bardwell 112 (Science Building).

My goals: By the end of the semester, I hope to teach you:

1. An appreciation for the elegance and beauty of mathematics.
2. Some fundamental concepts in various branches of mathematics.
3. To further develop logical thinking and problem-solving skills.
4. To appreciate the historical and conceptual development of mathematics by studying some broad aspects of its history.
5. To gain insight into how mathematics interacts with philosophy and theology, as well as some other disciplines such as art and literature.

Grading Scale – 1200 points total

25% Homework (23 Assignments), 300 points.
5% Quizzes (*15 throughout the semester; I drop the lowest 3*), 60 points.
20% Test 1, Chapters 1-7, September 21, 240 points.
20% Test 2, Chapters 8-13, October 14, 240 points.
10% Paper on the 80-page novel *Flatland* (700-900 words), due October 28, 120 points.
20% Test 3, Chapters 14-20, November 16, 240 points.
20% Test 4, Chapters 21-26, December 14 or 16, 240 points.
1:30 p.m. section, test at 12:30 p.m. Dec. 16; 3:00 p.m. section, 3:00 p.m. on Dec. 14.
(See www.biola.edu/registrar/final_exam for Final Exam Week schedule.)

I will drop your lowest test score (up to 240 points). These tests are not cumulative; I will not give you a cumulative final exam. Test 4 will take place during finals week, but will count the same as the other tests. See the schedule for due dates of the 23 homework assignments. Homework turned in late but before the next test is 20% off. **No homework accepted after day of test for those chapters.** There is a 10% penalty for each day late for the *Flatland* paper.

Required Texts:

Drawn to Infinity Coursepack written by Walt Stangl and Dave Carlson. Available only in the Biola Bookstore. (Note: Recent used books okay – major changes made summer 2007).

Flatland, by Edwin A. Abbott, a short novel available free online (Or \$2.00 in the bookstore.)

Calendar of Lectures and Tests: (Not Homework Due Dates)

Week	Monday	Wednesday
1	<i>Semester Begins Aug 26</i>	Aug 26 – Lecture Ch 1
2	Aug 31 – Lecture Ch 2, 3	Sept 2 – Lecture Ch 3
3	Labor Day Sept 7	Sept 9 – Lecture Ch 4
4	Sept 14 – Lecture Ch 5	Sept 16 – Lecture Ch 6, 7
5	Sept 21 – TEST 1 (Ch 1 – 7)	Sept 23 – Lecture Ch 8
6	Sept 28 – Lecture Ch 9	Sept 30 – Lecture Ch 10
7	Oct 5 – Lecture Ch 11	Oct 7 – Lecture Ch 12, 13
8	Oct 12 – Lecture 13, Review	Oct 14 – TEST 2 (Ch 8 – 13)
9	Oct 19 – Lecture Ch 14	Torrey Conf. Oct 21 – 23
10	Oct 26 – Lecture Ch 16	Oct 28 – Ch 15 – Paper Due
11	Nov 2 – Lecture Ch 17	Nov 4 – Lecture Ch 18
12	Nov 9 – Lecture Ch 19, 20	Nov 11 – Lecture Ch 20
13	Nov 16 – TEST 3 (Ch 14–20)	Nov 18 – Lecture Ch 21
	Nov 23 – Lecture Ch 22	Thanksgiving Nov 25-29
14	Nov 30 – Lecture Ch 23	Dec 2 – Lecture Ch 24
15	Dec 7 – Lecture Ch 25	Dec 9 – Lecture Ch 26
Finals	Dec 14 or 16 – Test 4 (Ch 21-26) , according to finals schedule 1:30pm section=16 th , 12:30pm section=14 th , 3:00pm section=14 th , 3:00pm	

Final exam schedule: www.biola.edu/registrar/final_exam

Homework: Write your name and chapter number legibly. Staple pages together, or write your name on each sheet. Do not staple multiple chapters together. **Show your work** when you can. Some answers are in the book for your reference, but you will not get credit for just copying the answers.

Draw a box around each answer. Left edge of paper should be straight (no ragged edges from notebook).

During Tests: You may use a calculator, but not a cell phone calculator. No music. Tests are a mix of multiple-choice, fill in the blank and short problems. They last 75 minutes, and have about 45 questions. See Appendix 4 in the coursepack textbook for sample test questions.

Academic Integrity: Plagiarism is the act of presenting someone else's ideas and work as your own. It ranges from not citing the sources of ideas and textual excerpts to turning in an essay or homework written by someone else. Plagiarism at Biola is not tolerated, and may result in failing the assignment or the course and further discipline by university officials.

Students desiring accommodations on the basis of physical, learning, or psychological disability for this class are to contact Disability Services. Disability Services is located in the Learning Center (upstairs in the Biola Library) and can be reached by calling (562) 906-4542 or ext. 4542 from on campus.

I am looking forward to this opportunity to teach you this semester, and hope that I can help you see a little bit more of the goodness, truth, and beauty of God. Feel free to let me know if there is any way I can make this a more valuable learning experience for you.

Homework Due Dates & Point Values

You can use this schedule to help yourself keep track of when homework is due, when you turned it in, and your scores. There is a copy of this on the inside back cover of your coursepack textbook.

	Chapter	Due Date	Points	Turned In	My Points	
Section 1	1	31-Aug	15			
	2	2-Sep	14			
	3	9-Sep	9			
	4	14-Sep	11			
	5	16-Sep	10			
	6	21-Sep	9			Last Day to turn in any late homework, Ch 1-7 is Sept 21
	7		7			
Section 2	8	28-Sep	12			
	9	30-Sep	15			
	10	5-Oct	16			
	11	7-Oct	14			
	12	12-Oct	6			Last Day to turn in any late homework, Ch 8-13 is Oct 14
	13	14-Oct	12			
	14	26-Oct	15			
Section 3	16	No Homework - Paper Due Oct 28				
	15	2-Nov	11			
	17	4-Nov	16			
	18	9-Nov	12			
	19	No Homework				Last Day to turn in any late homework, Ch 14-20 is Nov 16
	20	16-Nov	21			
	21	No Homework				
Section 4	22	30-Nov	14			
	23	2-Dec	12			
	24	7-Dec	13			
	25	9-Dec	21			Last Day to turn in any late homework, Ch 21-26 is Dec 16
	26	16-Dec	15			

If you turn in a homework assignment late, there is a 20% penalty. You cannot turn in a homework assignment after the day of the test for that section. However, I will not take 20% off for the first two assignments you turn in late during the semester, just as long as it is still before you take the test.

The **Quizzes** are worth 5 points each, and there are 15, but I will drop your 3 lowest scores. Your highest 12 quiz scores are worth 60 points.

The **Flatland Paper** is worth 120 points. Here is the assignment:

This paper is to be your personal reflections about the book *Flatland*. Do not just retell the story, unless there is a small portion of the story you need to refer to in order to make your point. Also, I do not expect you to reflect on the whole book. Pick one or maybe two ideas, and focus your reflections on that. Since these are to be your personal reflections, I would expect, even encourage you to look at the book from your own unique perspective. This could mean your cultural background, your life experiences, your political views, etc. Do not just tell me what you think I want you to say – tell me your ideas and explain them. This book is a bit slow at the beginning, and you may even find yourself wondering why you are reading it. Two words of advice: first, if you have concerns or questions, raise them and we can talk about them as a class; and second, persevere – the second half of the book is more interesting for most people than the first half. This paper should be **between 700 and 900** words long, and is due **October 28, 2009** preferably by the beginning of class but sent by 11:59 p.m. is not considered late.

You can buy a copy of *Flatland* at the Biola Bookstore for \$2.00, or you can read it online for free at: <http://www.geom.uiuc.edu/~banchoff/Flatland/>

To Turn In: Turn this in through the Blackboard system. If you use Microsoft Word, you can upload the Word document as-is. If you use any other word processor, do **Save As** and choose **RTF format or PDF format**, and upload that version.

Final Semester Letter Grade

The total number of points possible for the class is 1200 points. This chart shows your final semester letter grade based on how many points you earn:

To get this grade	You need this many points	Which is this percent
A	1116	93%
A-	1080	90%
B+	1044	87%
B	996	83%
B-	960	80%
C+	924	77%
C	876	73%
C-	840	70%
D+	804	67%
D	756	63%
D-	720	60%
F	719	59.9%

Extended Absences: The student handbook says that “students who miss more than 20% of regular class sessions (even if absences are considered ‘excusable’) may be required to drop the course.” If you miss more than three weeks’ worth of classes (6 classes), I will drop you from the class.

Homework extensions. I cannot grant any kind of homework extension beyond the day of the final exam. According to the faculty handbook, “All assignments must be in by the time of the final examination unless the Office of the Dean of Student Development or the dean of the instructional school has in advance granted an extension of time for some valid reason.”