## SURVIVAL SHEET: MATH 201 - SECTION 002

## FALL SEMESTER 2017

Required Texts: 1. Richard Hammack, Book of Proof, $2^{\text {nd }}$ edition, Hammack (2013)

2. William J. LeVeque, Elementary Theory of Numbers, Dover (1962)


Calculator: Your favorite calculator is permitted.
Instructor: A. Saleski
612 BVM Hall (contiguous with IES) building \# 37 on map ( 6349 N. Kenmore Ave., Chicago, IL 60660)
phone: (773) 508-3577
e-mail: asalesk@luc.edu or alan.saleski@gmail.com
Course URL: http://www.math.luc.edu/~ajs/courses/201fall2017/index.pdf
Office Hours: MWF 10:30-11:00 am; 3:00-3:30 pm TTh 4:00-5:00 pm or by appointment.

Ground Rules: The final grade is computed according to the following recipe:

| tests | $30 \%$ |
| :--- | :--- |
| homework | $35 \%$ |
| group work in class | $10 \%$ |
| final exam | $25 \%$ |


| extra credit | $4 \%$ |
| :--- | :--- |

## Important Dates:

- Total Solar Eclipse: Aug 21

- Tests: (all Thursdays) September 21; October 26; November 30
- Holidays:
* Labor Day: Monday, September $4^{\text {th }}$
* mid-semester break: Monday \& Tuesday, October $9^{\text {th }}-10^{\text {th }}$

* Thanksgiving break: Wednesday - Sunday, November $22^{\text {rd }}-$ November $26^{\text {th }}$

- Last day To Withdraw without a WF:
midnight, Friday, November $3{ }^{\text {rd }}$
- Last day of Class: Thursday, December $7^{\text {th }}$
- Final Exam, Saturday, December $16^{\text {th }}$ (4:15 pm)
- Loyola Calendar (Fall 2017)


## REMARKS:

1. Piazza will be our main form of communication outside of class. Upon receiving your welcome message from Piazza, you should join at once. All general questions/remarks/solutions should be posted in Piazza. If you wish to make a personal statement, you should send a private message in Piazza (or, if you prefer, use my gmail account.
2. Late homework will be accepted but at a penalty of $10 \%$ per day late (this includes Saturday and Sunday) up to three days. After three days the homework will not be
accepted. If a homework doesn't meet a certain degree of acceptability (to be discussed in class), it may not be graded.
3. Each test is will be about 75 minutes long. Some (or possibly all) of the tests will include a take-home portion. Make-up tests will be given only for non-frivolous reasons. The student should make prior arrangements with the instructor, if at all possible.
4. The minimum penalty for cheating is failure in the course. A student who improperly aids another with a homework assignment, a test, or the final exam is considered to be equally culpable. If you receive help on an assignment from anyone other than the instructor (this includes another student, the TA, a tutor, a family member, website, or friend), you should acknowledge this fact in a comment at the beginning of your homework. Incidents of academic dishonesty will be reported to the appropriate Dean.

- I'm not the sort of person who does my mathematics writing on paper. I do that at the last stage of the game. I do my mathematics in my head. I sit down for a hard day's work and I write nothing all day. I just think. And I walk up and down because that helps keep me awake, it keeps the blood circulating, and I think and think. (Sir Michael Atiyah)
- Any good theorem should have several proofs, the more the better. (Sir Michael Atiyah)
- I glory in the diversity of mathematics and the lack of a uniform straightjacket. (Sir Michael Atiyah, Bull. AMS, 2006, p. 87)
- Mere proof won't convince me. (Caption to a cartoon by James Thurber)
- If the people do not believe that mathematics is simple, it is only because they do not realize how complicated life is. (John von Neumann)
- ... for mathematical proofs, like diamonds, are hard and clear, and will be touched with nothing but strict reasoning. (John Locke, Second Reply to the Bishop of Worcester)
- Mystery is an inescapable ingredient of mathematics. Mathematics is full of unanswered questions, which far outnumber known theorems and results. It's the nature of mathematics to pose more problems than it can solve. Indeed, mathematics itself may be built on small islands of truth comprising the pieces of mathematics that can be validated by relatively short proofs. All else is speculation. (Ivars Peterson, from a Mathematical Mystery Cruise)
- Proof is an idol before whom the pure mathematician tortures himself. (Arthur Stanley Eddington, The Nature of the Physical World)
- Do mathematics only if you are passionate about it, only if you would do it even if you had to find the time for it after a full day's work in another job. Like poetry and music, mathematics is not an occupation but a vocation. (Béla Bollobás)
- In mathematics you don't understand things. You just get used to them. (John von Neumann)
- For in all sorts of reasoning every single argument should be managed as a mathematical demonstration (John Locke: Of the Conduct of the Understanding)
- One thing that really fascinates me about mathematics is its very real permanence. It is essentially immortal...Once a theorem always a theorem would summarize this viewpoint adequately. (A. B. Mingarelli)
- Because of mathematics' precise, formal character, mathematical arguments remain sound even when they are long and complex. In contrast, common sense arguments can generally be trusted only if they remain short; even moderately long nonmathematical arguments rapidly become farfetched and dubious. (Jacob T. Schwartz, 'Discrete thoughts')
- The problem with simple arguments is that they may be difficult to explain. (Karin Erdmann)

