

Mathematics 5
Course Syllabus- revised
February 10, 2011

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The list of topics below will give you some idea of the tentative schedule for Mathematics 5 this Winter. However, the topics may change depending upon the interests of the class, and if so, we will modify the schedule and agree on a new version. The chapter references are to the draft manuscript *Mathematics and Knowledge: Models of Reality* by Dwight Lahr.

Week	Topics	References
#1 Jan 5, 7	Visualization, Quantification, Abstraction	Chapter 1
#2 Jan 10, 12, 14	Abstraction, Idealization, Truth, Logic	Chapter 1, Chapter 2
#3 Jan 19, 21	Connectives, Thms, Prfs, Paradoxes	Chapter 2
#4 Jan 24, 26**, 28	Infinity, Zeno's Paradoxes	Chapter 6
#5 Jan 31, Feb 2, 4	Primes, Exponents	Ch. 3 (3.4, 3.5, 3.14, 3.15)
#6 Feb 7, 9	Congruence, ISBN	Chapter 4
#7 Feb 14, 16, 18	Fermat's Little Thm, Codes	Chapter 4
#8 Feb 21, 23**, 25	Euler's Thm, RSA Algorithm	Chapter 4
#9 Feb 28, Mar 2, 4	Einstein, Energy, $E = mc^2$	Chapter 9 (9.10 and 9.11)
#10 Mar. 7, 9	Wrap up; evaluations	Final Paper due Sat, 3/12

Notes:

* Week #3: MLK holiday on Monday, 1/17 (no class that day)

Week #6: Winter Carnival on Friday, 2/11 (no class that day)

** Quizzes: Wednesday, January 26; Wednesday, February 23.

Final seven-page paper due on first day of finals: Saturday, March 12.

Special schedules: MLK holiday No class on Monday in week #3
Winter Carnival No class on Friday in week #6