

SYLLABUS—MATH 101—Spring 09—section 10287

T,Th, 11:10-1:30, SC104

Reference Text: Bittinger, 10<sup>th</sup> edition

wk.	Date	Section	Worksheet number/ List of topics and skills.	Misc. Notes
1	1/20	R1	0. Integers: prime factoring, lcm and gcd, Euclidean algorithm.	
	1/22	R2, R3	1. Fractions: decimal expression, reducing, arithmetic operations.	
2	1/27	R5, 1.1	2. Rates, unit conversions. 3. Order of operations; evaluating algebraic expressions.	
	1/29	1.2, 1.7	4. Absolute value; Opposites and reciprocals	
3	2/3	1.7	5. Axioms of the Real Numbers.	
	2/5	1.8	6. Simplifying expressions. Factoring out the gcd.	2/8 census: last day to add a class.
4	2/10	2.1-2.4	7. Solving linear equations.	
	2/12	2.5, 2.6	8. Word problems (linear in one variable).	
5	2/17		Review 1. (Begin next topic)	T 2/17: first drop date.
	2/19		EXAM 1: covers worksheets 1-8	
6	2/24	2.7, 2.8	9. Inequalities, intersections and unions.	M 2/23: P/NP deadline
	2/26	3.1-3.3	10. The coordinate plane. Graphing lines, finding intercepts.	
7	3/3	3.4, 3.5	11. Slope; finding points on lines, giving linear equations from data, modeling one-variable problems.	
	3/5	3.6 7.1-7.3	12. Parallel and perpendicular lines; 13. Solving systems by substitution and elimination.	
8	3/10	7.4, 7.5	14. Word problems: two variables, mixing and motion.	
	3/12	4.1	15. Rules for exponents: simplifying expressions.	
9	3/17	4.2	16. Scientific notation; Unit conversion involving exponents.	
	3/1		Review 2. (Begin next topic)	
10	3/24		EXAM 2: covers worksheets 9-16	
	3/26	4.3-4.6	17. Arithmetic with polynomials in one variable.	3/27: midterm grades available.

11	3/31	4.7, 4.8	18. Polynomials in several variables: vocabulary and operations; division of polynomials in one variable. Binomial Theorem	Appendix A also
	4/2	5.1-5.6	19. Factoring polynomials.	
12	4/7	5.7	20. Solving polynomial equations by factoring.	
	4/9	8.1-8.4	21. Square roots: simplifying, addition and multiplication, rationalizing the denominator.	
13	4/14		<b>NO CLASS: Spring Break</b>	
	4/16		<b>Spring Break...</b>	
14	4/21		More time with square roots. Begin next topic.	
	4/23	9.1-9.5	22. Quadratic equations: special cases; completing the square; quadratic formula; simple applications.	F 4/24: last drop date.
15	4/28		<b>Review 3.</b> (Begin next topic)	
	4/30		<b>EXAM 3: covers worksheets 17-22</b>	
16	5/5	6.1-6.5	23. Rational expressions: domain, reducing, arithmetic.	
	5/7	6.6, 6.8	24. Rational equations.	
17	5/12	6.9	Direct and inverse variation.	
	5/14		<b>Review.</b>	Last regular class meeting
18	5/19		<b>FINAL EXAM: comprehensive, in class: 11:10-2:00</b>	

Student Learning Outcomes: The student learning outcomes for this class consist of the specific mathematical skills represented by the questions on the departmental sample final, a copy of which is included in this packet.