BRIDGE MATH 115 - COURSE OUTLINE SUMMER 2014

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Note: "Groupwork", "Practice" & "Project" refer to photocopied pages; all other references are to the textbook.

Date	Topic	Class	Textbook Practice–after Lecture, before WebAssign.
24 Jun	review of basics	Lecture 1.1 through 1.4 Math 115 Quiz 1 Groups review Quiz 1 1.1: 26, 64 1.2: 18, 20, 24, 36, 68 1.3: 20, 26, 76, 86, 101 1.4: 20, 32, 58	chapter review (page 124ff) 5-27 odd, 33-47 odd, 49, 55, 57, 59
	* supplemental instruction * **See notes below.**	Problem Set 1: 1, 2a	(Hint: for #2a: Think factoring.)
25 Jun	Equations	Groups chapter review (124ff): 10, 12, 14, 18, 20, 24, 26, 36, 38, 40, 42, 51, 57, 60 Lecture 1.5	1.5: 25, 35, 37, 49, 59, 69, 75, 85, 91, 93, 99, 105
	* supplemental instruction *	Problem Set 1: 3, 5 Problem Set 3: 3	
26 Jun	Inequalities	Groups 1.5: 80, 90, 92, 100, 102, 108 Lecture 1.7	1.7: 25, 31, 43, 45, 53, 59, 69, 79, 81, 83, 107, 117
	* supplemental instruction *	Problem Set 1: 2b, 2c, 4 Problem Set 4: 3	
27 Jun	functions & graphs	Groups 1.7: 32,34, 38, 44, 62, 86 Lecture 2.1 and 2.2 Groups Groupwork 2.1	2.1: 7, 11, 21, 23, 27 35, 47, 51, 65 Practice 2.1 **turned in for a grade** 2.2: 11, 15, 19, 23, 35, 37, 57, 61, 81
30 Jun	vocabulary of graphs average rate of change	Groups 2.1: 6, 10, 12, 22, 28, 50, 54, 60 2.2: 10, 24, 28, 36 Lecture 2.3 & 2.4	2.3: 5, 19, 23, 29, 31, 45 2.4: 11, 15, 19, 21, 25
	* supplemental instruction *	Problem Set 2: 1, 2, 6	****graphing calculator needed**
1 Jul	transformations of functions combining functions	Groups 2.3: 6, 20, 34 2.4: 8, 12, 16 Lecture 2.5 & 2.6	2.5: 4, 5-13 odd, 21-39 odd, 63 2.6: 5, 11, 23, 35, 41, 45, 49, 63
	* supplemental instruction *	Problem Set 3: 4 Problem Set 4: 1 – 2	
2 Jul	quadratic functions mathematical modeling	Groups 2.5: 62, 64abdf, 44, (86) 2.6: 10, 14, 44*, 46, 54 Lecture 3.1 & Modeling (213ff)	3.1: 13, 25, 27, 33, 35, 63, 67 Modeling: 7, 11, 13, 19b&c, 21b&c
	* supplemental instruction *	Problem Set 3: 1 Problem Set 4: 6	
3 Jul	polynomial functions & graphs	Groups 3.1: 14, 30, 40* Modeling: 6, 12, 26a, 24 Lecture 3.2	study for the test
	* supplemental instruction *	sample Exam 1	
7 Jul	rational functions	**Exam 1 (Ch 1-2, 3.1)** Lecture 3.7 Start Project 3.2 & 3.7	Project 3.2 & 3.7 **turned in for grade** 3.2: 7, 9-14 all, 17, 23, 25, 27, 33, 35, 63, 67 3.7: 23, 25, 33-39 odd, 36, 45, 53, 55, 57, 83
	* supplemental instruction *	Project 3.2 & 3.7	
8 Jul	exponential functions evaluating logarithms	Groups 3.2: 22, 40, special 3.7: 44, 50, 60, 88 Lecture 4.1-4.2 & 4.3a Groupwork 4.3a	4.1: 15, 19, 21, 25, 27, 29, 47 4.2: 7, 9, 13, 21 Practice 4.3a **turned in for a grade**
	* supplemental instruction *	Problem Set 8: 1, 6, 7	

9 Jul	logarithm graphs properties of logarithms	Groups 4.1: 26, 28, 30 4.2: 8, (22) Lecture 4.3b & 4.4	4.3: 5, 7, 9, 13, 17, 19, 23, 25, 29, 31, 35, 46, 49, 53, 55, 57, 63, 68, 87 4.4: 7, 9, 11, 17, 19, 21, 29, 33, 37, 41, 47, 49, 52, 55, 57, 72
	* supplemental instruction *	Problem Set 7: 3, 4, 6 Problem Set 8: 3, 4	
10 Jul	exponential & logarithmic equations	Groups 4.3: 12, 18, 48, 54, 58, 64 4.4: 14, 30, 36, 48*, 52, 66 Lecture 4.5	4.5: 7, 9, 11, 21, 25, 29, 33, 39, 41, 43, 49, 53, 81, 85
	* supplemental instruction *	Problem Set 7: 5 Problem Set 8: 5	
11 Jul	the unit circle trigonometric functions	Groups 4.5: 12, 26, 32, 36, 42, 46, 54, (56*) Lecture 5.1 & 5.2	study for the test
	* supplemental instruction *	sample Exam 2	
14 Jul	trigonometric graphs	**Exam 2 (Ch 3-4)** Groups 5.2: 16, 22, 52, 64 Lecture 5.3	5.1: 3, 9, 13, 17, 23-31 odd, 33; 35, 39-45 odd, 53 5.2: 5-23 odd, 47-59 odd, 64, 65, 67, 69, 81 5.3: 3-9 odd, 19, 21, 29, 33, 35, 39, 43, 47, 61, 77, 79
	* supplemental instruction *	Problem Set 9: 1, 4 Problem Set 10: 2, 3	
16 Jul	more trigonometric graphs	Groups 5.2: 66, 68 Groupwork 5.3 Lecture 5.4	5.4: 3-8, 9, 11, 27, 31, 33, 39, 43, 45, 53
	* supplemental instruction *	Problem Set 9: 2, 3 Problem Set 10: 1, 5, 6	(Hint: for PS12 #4: Use the formula in 7.2)
17 Jul	trigonometric identities addition & subtraction formulas (sin & cos only)	Groups: Groupwork 5.4 Lecture 7.1 & 7.2	7.1: 3-23 odd, 27, 31, 37, 39, 43, 53, 81, 91-96 7.2: 9, 11, 13, 17, 20, 21, 31, 39, 51, 53, 55, 59, 61
	* supplemental instruction *	Problem Set 9: 5 Problem Set 11: 6	
18 Jul	more trigonometric formulas: (memorize only sin & cos, 2x) trigonometric equations, part 1	Groups: 7.1: 7.2: Lecture 7.3 & 7.4a	7.3: 3, 9, 11, 13, 51, 53, 75, 77, 81, 105
	* supplemental instruction *	Problem Set 11: 5 Problem Set 12: 1, 2, 3	
21 Jul	trigonometric equations, part 2	Groups 7.3: Lecture 7.4b & 7.5	7.4: 5, 7, 13, 17, 21, 23, 27, 33, 41, 53, 59 7.5: 3, 5, 7, 11, 13, 17, 23, 27
	* supplemental instruction *	Problem Set 13: 1, 2, 3, 6	
22 Jul	trigonometry of right triangles	Groups 7.4: 7.5: Lecture 6.1, 6.2 & 6.3	study for the test
	* supplemental instruction *	sample Exam 3	
23 Jul	law of sines & law of cosines	**Exam 3 (Ch 5 & 7)** Groups 6.1: 6.2: 6.3: Lecture 6.5 & 6.6	6.1: 3, 5, 7, 9, 13, 15, 17, 19, 25, 27, 29, 31, 33, 35, 36, 45-47, 51, 53, 55, 57, 61, 71, 77 6.3: 47, 51, 52, 70 6.2: 5, 11, 19-25 odd, 30, 31, 33, 41, 43, 47, 49, 55, 59
	* supplemental instruction *	Problem Set 14: 3, 4, 6	

24 Jul		Groups 6.5: 6.6: review for the final exam	6.5: 5, 7, 13, 17, 19, 21, 23, 29, 33, 35, 39 6.6: 3, 7, 13, 15, 17, 39, 41, 43, 45, 47, 51
	* supplemental instruction *	Problem Set 15: 1, 2, 5, 6 sample final exams	study everything
25 Jul		**Final (comprehensive)**	

Grade: 20% for Homework & Quiz average, 20% each for Exams 1–3, 20% for Final Exam.

Supplemental Instruction

The first part of Supplemental Instruction (about 30 minutes) will be used to begin tackling the Textbook Practice in column 4 above. Work in pairs or triplets—help each other out in the rough spots. (This is a requirement, not a suggestion.) Your mentors will be circulating to give you some guidance as well. (Do not expect the mentor to *do* the practice questions for you, however!) Do as many as you can until your mentor calls time.

The second part of Supplemental Instruction will be devoted to the assignments from the Problem Sets. They are a bit more challenging than the homework exercises in the text, and a good example of the kind of thinking you'll need to do to be successful in Calculus. The schedule is flexible and you may not cover everything in the time allotted, but the bottom line is that you should be able to do *all* assigned exercises. If you have time left after doing the Problem Sets, go back to unfinished Textbook Practice or Problem sets from today or previous days.

WebAssign will need to be completed between the end of Mathematics Supplemental Instruction and 8:00 am the following morning.