Mrs. Bandy

Precalculus Syllabus 2025-26 (subject to small changes)

Wednesdays @ Metro 12:50-2:20

		**** Lessons in italics should be completed at home BEFORE class***			vid mins:
13-Aug	**week 1**	☐	1.1: Sets, real numbers, inequalities, abs. values	15	
	1A	☐	1.2: Exponents and radicals	19	
		☐	1.3: Polynomials, Pythagoras, geometry, calculators	10	
		☐	1.4:Equations, quadratic equations	15	
		☐	1.5: Mathematical modeling	17	61 min
20-Aug	**week 2**	☐	*1.6: More mathematical modeling*	21	
	1B	☐	1.7: Inequalities, combined inequalities, quad. Ineq.	25+18	
	1C	☐	1.8: Polynomial, rational, absolute value inequalities	25+49	50+ min
27-Aug	**week 3**	☐	*1.9: Complex numbers, complex conjugates*	30	
	1D	☐	1.10: *i* and powers of *i* , negative discriminants	14	
		☐	1.11: rectangular coordinates, dist & midpt formula	11	
		☐	1.12: graphing equations, using intercepts & symmetry	19	
		☐	1.13: circles	12	56 min
3-Sep	**week 4**	☐	*1.14: slope of a line, linear equation forms*	29	
	1E	☐	1.15: parallel and perpendicular lines	12	
	(1F)	☐	2.1: definition of a function	15	
	(1G)	☐	2.2: graph of a function	22	
		☐	2.3: function notation, difference quotients	25	74 min
10-Sep	**week 5**	☐	*2.4: important functions*	20	
	T1	☐	2.5: piecewise functions	10	
	2A	☐	2.6: graphing functions	7	
	2B	☐	2.7: scaling a graph vertically	8	
		☐	2.8: combining graphing procedures	12	
		☐	2.9: operations on functions	10	47 min
17-Sep	**week 6**	☐	*2.10: composite functions - begin at home through 2.10e*	9	
		☐	2.10: composite functions - finish in class, f - i	27	
	2C	☐	2.11: one-to-one functions	12	
	2D	☐	2.12: inverse functions	12	
	2E	☐	2.13: mathematical models	9	
	(2F)	☐	2.14: more mathematical models	10	70 min
24-Sep	**week 7**	☐	*3.1: quadratic functions*	21	
	T2	☐	3.2: graphing quadratics	11	
	3A	☐	3.3: applications	18	29
1-Oct	**week 8**	☐	*3.4: polynomial functions*	18	
	3B	☐	3.5: graphing polynomial functions	23	
		☐	3.6: analyzing graphs of polynomials	23	46 min
8-Oct	**week 9**	☐	*3.7: rational functions*	*15*	
AT HOME	3C	☐	*3.8: asymptotes*	*25*	
no class meeting		☐	*3.9: graphing rational functions*	*19*	
today		☐	*3.10: graphing more rational functions*	*21*	80 min
15-Oct	**off**	**Fall Break!**			

22-Oct	**week 10**	☐ *3.13: zeros of a polynomial*	*19*	
	3D	☐ 3.11: division of polynomials	23	
		☐ 3.12: synthetic division	16	
		☐ 3:14: finding real zeros	41	80 min
29-Oct	**week 11**	☐ *3:15: approximating real zeros videos 3.15a - e only*	11	
	3E	☐ *3:16: fundamental theorem of algebra*	8	
	(3F) (3G)	☐ 3:15: approximating real zeros - Intermediate Value Thm	7	
		☐ 3:17: complex polynomials	17	
		☐ 4.1: exponential and logarithmic functions	39	
		☐ 4.2: the base e	16	79 min
5-Nov	**week 12**	☐ *4.3: logarithmic functions*	12	
	T3	☐ 4.4: graphs of logarithmic functions	12	
	4A	☐ 4.5: properties of logarithms	25	
	4B	☐ 4.6: logarithms on a calculator	13	50 mn
12-Nov	**week 13**	☐ *4.7: logarithmic equations*	13	
	4C	☐ 4.8: exponential equations	30	
		☐ 4.9: compound interest	17	
		☐ 4.10 more compound interest	13	60 min
19-Nov	**week 14**	☐ *4.13: logarithmic scales*	18	
	4D	☐ 4.11: growth and decay	17	
	(4E)	☐ 4.12: radioactive decay	26	43 min
26-Nov		**THANKSGIVING BREAK**		
3-Dec	**week 15**	REVIEW DAY in class		
	T4	**exam review packet!**		61 min
10-Dec	**week 16**	☐ *5.1: angles and degrees*	32	
	5A	☐ 5.2: circular motion	31	
		☐ 5.3: the unit circle	20	
		☐ 5.4: trig functions of common angles	35	86 min
		midterm exam due by 12/12 - Metro semester grade deadline 12/23		
		Precalculus Spring Semester		
7-Jan	**week 17**	☐ *5.5: domain and range of trig functions*	27	
	5B	In Class: quick review of the unit circle	12	
	5C	☐ 5.6: fundamental identities	25	
	5D	☐ 5.7: right triangle trigonometry	13	
		☐ 5.8: reference angles	14	
		☐ 5.9: solving right triangles	8	
		☐ 5.10: applications	15	87 min
14-Jan	**week 18**	☐ *6.1: graphs of the sine function*	38	
	T5	☐ 6.2: graphs of the cosine function - practice some in class	18	
	6A	☐ 6.3: sinusoidal graphs	22	
	6B	☐ 6.4: phase shifts	17	57 min
21-Jan	**week 19**	☐ *6.6: simple harmonic motion*	14	
	6C	☐ 6.5: combining waves	23	
		☐ 6.7: graphs of the tangent function	10	
		☐ 6.8: graphs of cosecant, secant, cotangent	16	
		☐ 6.9: inverse sine	10	59 min

28-Jan	**week 20**	☐ *6.10: inverse cosine*	4	
	6D	☐ *6.11: inverse tangent*	4	
	7A	☐ 6.12: expressions involving trig functions	10	
		☐ 7.1: trigonometric identities	27	
		☐ 7.2: sum and difference formulas	33	70 min
4-Feb	**week 21**	☐ *7.3: more sum and difference formulas*	12	
	T6	☐ *7.4: double angle formulas*	14	
	7B	☐ 7.5: half angle formulas	7	
	7C	☐ 7.6: sum to product and product to sum formulas	3	
	7D	☐ 7.7: trigonometric equations	15	
		☐ 7.8: more trigonometric equations	31	56 min
11-Feb	**week 22**	☐ *8.1: law of sines*	12	
	T7	☐ 8.2: the ambiguous case	27	
	8A	☐ 8.3: applications	11	
	8B	☐ 8.4: law of cosines	14	
	8C	☐ 8.5: area of a triangle	7	59 min
18-Feb	**off!**	**Winter break - catch up week!!**		
25-Feb	**week 23**	☐ *8.6: polar coordinates*	13	
	8D E	☐ 8.7: polar and rectangular conversion	27	
	8F	☐ 8.8: polar equations graph	12	
		☐ 8.9: more polar equations and graphs	21	
		☐ 8.10: even more polar equations and graphs	5	65 min
4-Mar	**week 24**	☐ *8.11: complex numbers*	41	
	8G H	Practice 8.11 and anything else in class		
	8I	☐ 8.12: DeMoivre's theorem	9	
11-Mar	**week 25**	☐ *9.1: Conic Sections*	5	
	T8	☐ 9.2: Parabolas	26	
	9A	☐ 9.3: translation of parabolas	20	
		☐ 9.4: Ellipses	23	69 min
18-Mar	**week 26**	☐ *9.5: translation of ellipses*	32	
	9B	☐ *9.8: general form of a conic*	8	
	9C	☐ 9.6: Hyperbolas	15	
		☐ 9.7: translation of hyperbolas	16	
		☐ 9.9: parametric equations	23	
		☐ 9.10: parametric equations on a calculator	15	77 min
25-Mar	**week 27**	☐ *10.1: solving systems*	15	
	T9	Practice with ch 9, esp. parametric equations	20	
	10A	☐ 10.2: more solving systems	11	
		☐ 10.3: even more solving systems	22	53 min
1-Apr	**week 28**	☐ *10.4: matrix notation just videos a & b*	7	
	10B	☐ 10.4: matrix notation finish in class	13	
	10C	☐ 10.5: echelon form	15	
		☐ 10.6: determinants	28	56 min
8-Apr		**SPRING BREAK!!**		

15-Apr	**week 29**	☐ *10.7: nonlinear systems*	17	
	10 E F	☐ 10.8: systems of inequalities	29	
		☐ 11.1: sequences, etc. Begin in class	30	59 min
22-Apr	**week 30**	☐ *11.1: sequences, etc. finish at home*	10	
	T10	☐ 11.2: factorials, redursion, summation notation	42	
	11A	☐ 11.3: arithmetic sequences and series	19	
	11B	☐ 11.4: geometric sequences and series	18	79 min
29-Apr	**week 31**	☐ 11.5: mathematical induction	44	
	11C	☐ 11.6: the binomial theorem	32	76 min
6-May	**week 32**	No chapter 11 test!! - but it will appear on the final exam!		
		EXAM REVIEW - in class		
		final exam due by 5/22/2026		
		*work submitted by 5/20 will be eligible for corrections		
		Metro final grade deadline 5/25		