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Syllabus and Problem List for Math 152, Sections 1 and 2

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Text *Calculus (Early Transcendentals)*, 3^{rd} ed., Brooks/Cole, by James Stewart

Calculator A graphing calculator is required for this course. We recommend the TI-82, but any calculator with equivalent capacities can be used. Calculators or portable computers with QWERTY keyboards *cannot* be used on exams.

Date	Lecture	Reading	Topics
1/18	1	5.5, 6.1	Integration by substitution, area
1/22	2	6.2, 6.3	Volumes
1/25	3	6.4, 6.5	Work, average values
1/29	4	7.1, 7.2	Integration by parts, trigonometric integrals
2/1	5	7.3, 7.4	Trigonometric substitution, partial fractions
2/5	6	7.6, 7.7	Integration strategies
2/8	7	7.8	Approximations for integrals
2/12	8	7.9	Improper integrals
2/15	9	8.1- 8.3	Differential equations, arc length, surface area
2/19	10	8.4	Moments, center of mass, review
2/22	11	**First Exam** (usual class time & place)	
2/26	12	10.1	Sequences
2/29	13	10.2	Series
3/4	14	10.3	Integral test, estimates
3/7	15	10.4	Comparison tests
3/18	16	10.5, 10.6	Alternating series, absolute convergence
3/21	17	10.6, 10.7	Ratio and root tests, strategies
3/25	18	10.8, 10.9	Power series, representation of functions
3/28	19	10.10	Taylor series
4/1	20	10.11, 10.12	Binomial series, applications
4/4	21		Review of sequences and series
4/8	22	**Second exam** (usual class time & place)	
4/11	23	9.1	Parametric equations
4/15	24	9.2	Tangents
4/18	25	9.3	Arc length
4/22	26	9.4	Polar coordinates
4/25	27	9.5	Calculus in polar coordinates
4/29	28		Review
5/1	**Final Exam**, 4:00-7:00 PM (place to be announced)		

OVER

Suggested problem list for Math 152

Text *Calculus (Early Transcendentals)*, 3rd ed., Brooks/Cole, by James Stewart

Section	Suggested problems
5.5	1, 5, 12, 21, 30, 36, 37, 41, 44, 61, 68, 74, 81
6.1	2, 3, 11, 21, 22, 35, 45, 46
6.2	4, 7, 9, 17, 18, 33, 51, 55, 56, 60
6.3	2, 3, 13, 18, 35, 36
6.4	3, 5, 11, 16
6.5	5, 10, 12
7.1	1, 4, 5, 8, 13, 14, 37, 41, 56
7.2	1, 6, 17, 19, 20, 54, 58
7.3	5, 7, 8, 11, 14, 36
7.4	3, 9, 11, 19, 25, 39, 43
7.6	1, 2, 9, 15, 20, 23, 46, 49
7.8	1, 3, 4, 7, 21, 29, 32
7.9	1, 2, 3, 4, 12, 13, 27, 29, 30
8.1	3, 4, 17, 19, 29
8.2	5, 10, 21, 22
8.3	1, 6, 8, 23
8.4	1, 5, 10, 11, 18, 27
9.1	3, 9, 10, 13, 14, 28, 31
9.2	1, 2, 7, 12, 19, 24, 27
9.3	1, 6, 7, 9, 14, 15
9.4	4, 12, 20, 28, 47, 63, 74, 75
9.5	2, 5, 9, 17, 20, 44, 48
10.1	2, 3, 11, 12, 15, 19, 20, 24, 29 30, 59
10.2	7, 19, 20, 25, 27, 29, 40, 55
10.3	1, 3, 7, 9, 10, 17, 19, 25, 28
10.4	1, 2, 3, 6, 9, 16, 31, 33, 36
10.5	3, 4, 9, 10, 26, 27, 31
10.6	1, 4, 5, 10, 17, 20, 24, 25, 33, 34,
10.7	1, 5, 6, 8, 15, 23, 30, 37
10.8	1, 2, 3, 9, 10, 13, 24, 33
10.9	3, 11, 12, 21, 24, 25, 28, 35
10.10	2, 3, 17, 19, 20, 25, 33, 34, 37, 41
10.11	4, 13
10.12	3, 5, 9, 10, 13, 18, 19, 22