

Mathematics A1 Schedule

2011/12/1

No. week		Topics	
1	09.05. Mo 09. 06 Tue 09.08. Thu	Introduction to complex numbers. Operations, solving equations Complex numbers (cont.) Complex numbers (cont.)	
2	09. 12. Mo 09. 13 Tue 09.15. Thu	Vectors in 3-space Lines and planes in 3-space NO CLASS (University day)	Quiz 1
3	09. 19. Mo 09. 20. Tue 09. 20. Thu	Lines and planes in 3-space (cont.) Numerical sequences Numerical sequences	Quiz 1
4	09. 26. Mo 09. 27. Tue 09.29. Thu	Elementary functions, inverse function Inverse trig functions , Hyperbolic functions and their inverses Limit of functions	Quiz 3
5	10. 03. Mo 10. 04. Tue 10. 06. Thu	Limit of functions (cont.) Continuity. Derivation, rules of differentiation.	Quiz 4
6	10. 10. Mo 10. 11. Tue 10. 13. Thu	Derivatives of elementary functions Practice MIDTERM TEST 1	
7	10. 17. Mo 10. 18. Tue 10. 21. Thu	Mean value Theorem L'H rule. Extremal values, concavity. Curve sketching	Quiz 5
8	10. 24. Mo 10. 25. Tue 10. 27. Thu	Curve sketching Optimization Derivation of implicitly given functions	Quiz 6
9	10. 31. Mo 11. 01. Tue 11. 03. Thu	NO CLASS (day off, national holiday) NO CLASS (day off, national holiday) (make up class will be scheduled on Derivation of parametrized curves) Taylor-polynomial, Taylor's theorem	Quiz 7
10	11. 07. Mo 11. 08. Tue 11. 10. Thu	(cont.) Indefinite integral Integration by parts, rational fractions	Quiz 8
11	11. 14. Mo 11. 15. Tue 11. 17. Thu	Integration by substitution. Practice of integration techniques Definite integral. Applications: area of region between curves, arc length	Quiz 9
12	11. 21. Mo 11. 22. Tue 11. 24. Thu	Practice Practice MIDTERM TEST 2	
13	11. 28. Mo 11. 29. Tue 12. 01. Thu	More applications of Definite integrals Surface area, volume of solids of rotation, centroid of regions Improper Integrals	Quiz 10
14	12. 05. Mo 12. 06. Tue 12. 08. Thu	Improper integrals (cont.) Improper integrals (cont.) REP. TEST	

Sept. 4th , 2011

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