

CS E6204 TOPICS in GRAPH THEORY
revised course outline
subject to further perturbations

day	date	#	content and source
Mon	25-Jan	1.	Computer-Graphics Models for Woven Images on Surfaces
Mon	1-Feb	2.	Minimum and Maximum Genus of a Graph
Mon	8-Feb	3.	Genus Distribution of a Graph
Mon	15-Feb	4.	Genus Dist of Cubic Outerplanar Graphs
Mon	22-Feb	5.	Automorphisms
Mon	1-Mar	6.	Cayley Graphs
Mon	8-Mar	7.	Celtic Knots
Mon	15-Mar	•	SPRING ACADEMIC RECESS
Mon	22-Mar	8.	Celtic Knot Polynomials; Knots and Graphs
Mon	29-Mar	•	NO CLASS
Mon	5-Apr	9.	Skein Trees and Knot Polynomials
Mon	12-Apr	10.	Graph Mappings and Measurements
Mon	19-Apr	11.	Maps on Surfaces
Mon	26-Apr	12.	Genus of a Group
Mon	3-May	13.	Completion

no required text, but we will have several text sources:

(HBGT) Gross and Yellen, Handbook of Graph Theory, CRC Press, 2004.

(GTAIA) Gross and Yellen, Graph Theory and Its Applications, 2d Edition, CRC Press, 2006.

(TTGT) Gross and Tucker, Topics in Topological Graph Theory, Cambridge Univ Press, 2009.

I will distribute copies of the relevant chapters from my books and also copies of several of my recent research papers.

COURSENOTES: to be posted as pdf's on class website.