Calendar Spring 2012 **Math 758**

Jim Fowler

Week 1		Week 5	
Monday, March 26, 2012	Lecture 1	Monday, April 23, 2012	Lecture 17
3 .	Cochain complexes	, , , , , , , , , , , , , , , , , , ,	Poincaré duality for compact manifolds
Tuesday, March 27, 2012	Lecture 2	Tuesday, April 24, 2012	Lecture 18
3 .	Ext functor for Z-modules	•	Compactly supported cohomology
Wednesday, March 28, 2012	Lecture 3	Wednesday, April 25, 2012	Lecture 19
	Universal coefficient theorem		Duality for non-compact manifolds
Thursday, March 29, 2012	Lecture 4	Thursday, April 26, 2012	Lecture 20
	Prescribing cohomology		Problem session
Week 2		Week 6	
Monday, April 2, 2012	Lecture 5	Monday, April 30, 2012	Lecture 21
	Excision and pairs		Euler characteristic
Tuesday, April 3, 2012	Lecture 6	Tuesday, May 1, 2012	Lecture 22
•	Eilenberg-Steenrod Axioms		Manifolds with boundary
Wednesday, April 4, 2012	Lecture 7	Wednesday, May 2, 2012	Lecture 23
	Cup product		Lefschetz and Alexander duality
Thursday, April 5, 2012	Lecture 8	Thursday, May 3, 2012	Lecture 24
	Graded commutativity of cup product		Problem session
Week 3		Week 7	
Monday, April 9, 2012	Lecture 9	Monday, May 7, 2012	Lecture 25
	Projective spaces		Submanfold intersection, linking
Tuesday, April 10, 2012	Lecture 10	Tuesday, May 8, 2012	$Lecture \ 26$
	Cross product and relations		Quadratic forms
Wednesday, April 11, 2012	Lecture 11	Wednesday, May 9, 2012	Lecture 27
	Künneth formula		Signature obstruction
Thursday, April 12, 2012	Lecture 12	Thursday, May 10, 2012	Lecture 28
	Problem session		Problem session
Week 4		Week 8	
Monday, April 16, 2012	Lecture 13	Monday, May 14, 2012	Lecture 29
	Local orientation on manifolds		H-spaces
Tuesday, April 17, 2012	Lecture 14	Tuesday, May 15, 2012	Lecture 30
	Fundamental class		Hopf algebras
Wednesday, April 18, 2012	Lecture 15	Wednesday, May 16, 2012	Lecture 31
	Cap products		Cohomology of orthogonal groups
Thursday, April 19, 2012	Lecture 16	Thursday, May 17, 2012	Lecture 32
	Problem session		Problem session

Week 9

Monday, May 21, 2012

 $Lecture\ 33$

Bockstein homomorphisms

Tuesday, May 22, 2012

Wednesday, May 23, 2012

Lecture 34
Lens spaces
Lecture 35

Cohomology of orthogonal groups