Topic I: Comparison and Metric Riemannian Geometry

1. Sectional curvature comparison (local version)
Metric and Hessian comparison
Jacobi fields comparison and injective raduis estimate
Topology of manifolds with negative/nonpositive sectional curvature
Synge's trick on positive sectional curvature

2. Ricci curvature comparison
Laplacian comparison
Relative volume comparison and applications
Splitting theorem

3. Sectional curvature comparison (global version)
Toponogov theorem
Gromov's short basis and bounding number for generators of π_1
Critical point theory and applications
Soul theorem

4. Gromov-Hausdorff topology
Gromov-Hausdorff distance and approximations
Precompactness theorem
Equivariant Gromov-Hausdorff distance
Pointed Gromov-Hausdorff distance

5. Convergence theory for manifolds with bounded sectional curvature
Fibration theorem
Harmonic radius estimate and $C^{1,\alpha}$-convergence theorem
Singular fibration theorem

Topic II: Symplectic Geometry

1. Symplectic manifolds
Symplectic manifolds and Lagrangian submanifolds
Darboux-Moser theorems
Hamiltonian vector fields and Possion brackets

2. Complex structures
Compatible almost complex structures
Complex manifolds and Kahler manifolds
Dolbeault cohomology

3. Moment maps
Hamiltonian group actions
Symplectic reduction
Existence and uniqueness of moment maps