Topic 1 : Symplectic Geometry

Symplectic vector spaces
Symplectic manifolds
Lagrangian submanifolds
Almost complex structures

Symplectic group actions
Moment maps

Pseudoholomorphic curves
Floer homology
Gromov compactness

References:
Dusa McDuff, Dietmar Salamon, Introduction to symplectic topology.
Dusa McDuff, Dietmar Salamon, J-holomorphic curves and symplectic topology.

Topic 2 : Algebraic Topology

The Fundamental Group
The Van Kampen Theorem
Covering Spaces
Lifting properties
Deck Transformation group

Homology
Exact Sequences and Excision
Cellular Homology
Mayer-Vietoris Sequence

Cohomology ring

Kunneth formula
Cup and Cap Products
Poincare Duality

Reference
Allen Hatcher, Algebraic Topology.