1. Riemann surfaces. Elementary facts from hyperbolic geometry.


5. Gromov compactness theorem.

6. The role of a taming symplectic structure. Gromov width, symplectic camel problem, Arnold conjectures, properties of Lagrangian manifolds and other applications of holomorphic curves to symplectic topology.

7. Filling with holomorphic discs and applications to contact geometry.

8. Holomorphic curves in symplectic 4-manifolds. Adjunction formula and applications.

9. Introduction to Symplectic Field Theory. The algebraic structures arising in the SFT and relations with the theory of integrable system.

The course will be essentially independent of 257A.

Y. Eliashberg