This second semester in differential geometry will cover topics on Riemannian metrics, connections, geodesics, curvature, Jacobi fields and connections with topology. The course will be a continuation of Geometry I, and begin with topics amongst DeRham theory and Lie theory that were not covered in the fall.

Textbooks:
*Introduction to Smooth Manifolds* by John M. Lee
*Riemannian Manifolds: An Introduction to Curvature* by John M. Lee

Both of these are Springer Graduate Texts.