Mathematics 3260H – Geometry II: Projective and non-Euclidean geometry
Trent University, Winter 2015
Additional Sources

This list is not at all comprehensive, so feel free to look for more sources.

1. *The Thirteen Books of the Elements*, Euclid. Translated with introduction and commentary by Sir Thomas L. Heath.
   Reprinted by Dover Publications, Inc., New York. Vol 1, ISBN 0-486-60088-2; Vol. 2, ISBN 0-486-60089-0; Vol. 3, ISBN 0-486-60090-4.

2. *Euclid's Elements*, David E. Joyce
   aleph0.clarku.edu/~djoyce/java/elements/toc.htm
   A very nice online edition of Euclid.

3. *Euclid's Elements in Greek*, Richard Fitzpatrick
   farside.ph.utexas.edu/euclid.html
   The *Elements* in the original Greek with a facing English translation, freely available for download in pdf format.

4. *Foundations of Geometry*, David Hilbert. (Translated by E.J. Townsend.)
   Reprint Edition, The Open Court Publishing Company, La Salle, Illinois.
   Freely available for download in pdf format from Project Gutenberg at:
   www.gutenberg.org/etext/17384 .

5. *Geometry from Eucid to Knots*, Saul Stahl.
   Dover Publications, Inc., New York, 2010, ISBN-10: 0-486-47459-3, ISBN-13: 978-0-486-47459-5.
   This book was the text for MATH 2260H – *Geometry I: Euclidean Geometry* for the last few years. Chapters I and 2, as well as Appendices C–E, are particularly relevant to MATH 3260H.

6. *Non-Euclidean Geometry*, Roberto Bonola. (Translated by H.S. Carslaw.)
   Reprinted by Dover Publications, Inc., New York. ISBN 0-486-60027-0
   This book gives a historical development of non-Euclidean geometry and includes translations of Bolyai's *The Science of Absolute Space* and Lobachevski's *The Theory of Parallels* as appendices. It may be downloaded for free in various formats at:
   archive.org/details/Non-euclideanGeometry

7. *Non-Euclidean Geometry*, Henry Parker Manning, 1901.
   It may be downloaded for free from *Project Gutenberg* at:
   www.gutenberg.org/ebooks/13702

8. *Noneuclidean Geometry*, Herbert Meschkowski. (Translated by A. Shenitzer.)
   Academic Press, New York and London, 1964.
   Your instructor likes to crib from this one . . .

9. *The Elements of Non-Euclidean Geometry*, D.M.Y. Sommerville
   Reprinted by Dover Publications, Inc., New Yorl, ISBN 0-486-44222-5.
   It may be downloaded for free in various formats at:
   archive.org/details/ElementsOfNonEuclideanGeometry

10. *Projective Planes*, D.R. Hughes and F.C. Piper.
    Graduate Texts in Mathematics 6, Springer-Verlag, New York, 1973, ISBN 0-387-90044-6.
    Note: This is a very good book, but is intended for readers that are pretty mathematically sophisticated. In particular, you will really need to know a fair bit of abstract algebra to get the most out of it.

11. *Wikipedia*, `wikipedia.org/`
    This is a pretty good place to start if you're looking online for information about mathematics. A few articles of interest for this course are:

    Eucidean geometry, `en.wikipedia.org/wiki/Euclidean_geometry`
    Non-Euclidean geometry, `en.wikipedia.org/wiki/Non-Euclidean_geometry`
    Projective geometry, `en.wikipedia.org/wiki/Projective_geometry`

    There are many specialized articles in *Wikipedia* that may be of interest: follow links, search, and browse!

Last modified 2015.01.06.