BIBLIOGRAPHY

This is certainly not meant to be comprehensive, but it does list numerous books and papers that influenced the writing of these notes as well as references to some additional topics that were mentioned but not discussed in much detail. Throughout the notes there are also references to World Wide Web sites for further information on various points; in all cases, the mathematical content of online sites has been checked for reliability and meets the standards of quality expected for regular printed publications.

1. Books covering background material

N. Altshiller Court. College Geometry: An Introduction to the Modern Geometry of the Triangle and the Circle (2nd Rev. Enl. Ed.). Dover, New York, 2007.

M. Hausner. A Vector Space Approach to Geometry. Dover, New York, 1998.

P. J. Kelly and E. G. Strauss. Analytic Geometry and Linear Transformations. Scott-Foresman, Glenview, IL, 1970.

A. Pettofrezzo. Vectors and their applications. Dover, New York, 2005.

S. Schuster. Elementary Vector Geometry. Wiley, New York, 1962.

2. Cultural and historical discussions of projective geometry

N. Altshiller Court. Mathematics in Fun and in Earnest. Dover, New York, 2006.

C. B. Boyer and U. C. Merzbach. A History of Mathematics (2nd Rev. Ed., with a foreword by Isaac Asimov). Wiley, New York, 1991.

J. L. Coolidge. A History of Geometrical Methods. Dover, New York, 1963.

J. L. Coolidge. A History of the Conic Sections and Quadric Surfaces. Dover, New York, 1968.

J. L. Coolidge. The Mathematics of the Great Amateurs. Dover, New York, 1963.

R. Courant and H. Robbins. What is Mathematics? An Elementary Approach to Ideas and Methods (2nd Ed.). Oxford University Press, New York, 1996.

V. J. Katz. A History of Mathematics: An Introduction (2nd Ed.) Addison-Wesley, Boston, MA, 1998.

M. Kline. Mathematical Thought from Ancient to Modern Times. Oxford University Press, New York, 1972.

3. Similar material to the notes at comparable levels

R. Artzy. Linear Geometry. Addison-Wesley, Reading, MA, 1963.

M. K. Bennett. Affine and Projective Geometry. Wiley-Interscience, New York, 1995.

G. [Garrett] Birkhoff and S. MacLane. A Survey of Modern Algebra. (Reprint of the Third 1968 Edition.) Chelsea, New York, 1988.

R. Bumcrot. Modern Projective Geometry. Holt, Rinehart and Winston, New York, 1969.

W. Fishback. Projective and Modern Geometry (2nd Ed.). Wiley, New York, 1966.

R. Hartshorne. Foundations of Projective Geometry. Benjamin, New York, 1967.

G. Hochschild. A Second Course in Analytic Geometry. Holden-Day, San Francisco, 1969.

I.Kaplansky. Linear Algebra and Geometry – A Second Course.

J. Murtha and E. Willard. Algebra and Geometry. Holt, Rinehart and Winston, New York, 1969.

R. Rosenbaum. Introduction to Projective Geometry and Modern Algebra. Addison-Wesley, Reading, MA, 1963.

O. Schreier and E. Sperner. Projective Geometry. Chelsea, New York, 1953.

A. Seidenberg. Lectures on Projective Geometry. Dover, New York, 2006.

J. Stillwell. The Four Pillars of Geometry. (Springer) Undergraduate Texts in Mathematics. Springer-Verlag, New York-(*etc.*), 2005.

R. Winger. Introduction to Projective Geometry. Dover, New York, 1962.

4. Related material at comparable levels

(Most books under heading **3** also deserve a secondary classification here.)

J. N. Cederberg. A course in Modern Geometries. (Corrected 2nd printing of the 2nd Edition). Springer-Verlag, New York-(*etc.*), 2004.

H. S. M. Coxeter. The Real Projective Plane (2nd Ed.). Cambridge University Press, New York, 1955.

H. S. M. Coxeter. Introduction to Geometry. Wiley, New York, 1961.

D. Hilbert. Foundations of Geometry (2nd Ed.). Open Court Publishing, Chicago, IL, 1971. (This book is also available online.)

H. Levy. Projective and Related Geometries. MacMillan, New York, 1964.

E. E. Moise. Elementary Geometry from an Advanced Standpoint (3rd Ed.). Addison-Wesley, Reading, MA, 1991.

W. Prenowitz and M. Jordan. *Basic Concepts of Geometry*. Xerox Publishing, Waltham, MA, 1965.

E. C. Wallace and S. F. West. *Roads to Geometry* (3rd Ed.). Prentice-Hall, Upper Saddle River, NJ, 2003.

A. N. Whitehead. The Axioms of Descriptive Geometry. Cambridge University Press, New York, 1905. (This book is also available online.)

5. More avanced material or at higher levels

A. A. Albert and R. Sandler. An Introduction to Finite Projective Planes. Holt, Rinehart and Winston, New York, 1968.

E. Artin. Geometric Algebra. Wiley (Interscience), New York, 1957.

R. Baer. Linear Algebra and Projective Geometry. Pure and Applied Mathematics Vol. 2. Academic Press, New York, 1952.

G. [Garrett] Birkhoff. Lattice theory. Corrected reprint of the 1967 Third Edition. American Mathematical Society Colloquium Publications, Vol. 25. American Mathematical Society, Providence, RI, 1979.

F. Buekenhout (ed.). Handbook of Incidence Geometry. Elsevier Science Publishing, New York-(etc.), 1995.

R. Bumcrot. (see above)

J. Dieudonné. Linear Algebra and Geometry. Hermann and Houghton Mifflin, 1968.

H. G. Forder. Foundations of Euclidean Geometry. Dover, New York, 1958.

M. Hall. Theory of Groups. MacMillan, New York, 1959.

N. Jacobson. Lectures in Abstract Algebra, Vol. II: Linear Algebra. Van Nostrand, New York, 1953.

W. Jenner. Rudiments of Algebraic Geometry. Oxford University Press, New York, 1963.

I. Kaplansky. (see above)

C. C. Lindner and C. A. Rodger. *Design theory.* CRC Press Series on Discrete Mathematics and its Applications. CRC Press, Boca Raton, FL, 1997.

J. G. Oxley. Matroid Theory. Oxford University Press, New York, 1993.

A. Seidenberg. *Elements of the Theory of Algebraic Curves.* Addison-Wesley, Reading, MA, 1968.

6. Papers or journal articles

A. Cronheim. A proof of Hessenberg's Theorem. Proc. Amer. Math. Soc. 4 (1953), 219–221.

J. Dieudonné. The historical development of algebraic geometry. Amer. Math. Monthly **88** (1972), 827–866.

S. Gorn. On incidence geometry. Bull. Amer. Math. Soc. 46 (1940), 158–167.

H. Whitney. On the abstract properties of linear dependence. Amer. J. Math. **57** (1935), 509–533.

7. Unpublished material

S.-S. Chern. Fundamental Concepts of Geometry. Mimeographed lecture notes, University of Chicago, 1953.

8. Links to the World Wide Web

http://www.dartmouth.edu/~matc/math5.geometry/unit11/unit11.html

http://en.wikipedia.org/wiki/Projective_geometry

http://www.nct.anth.org.uk/basics.htm

http://www.math.poly.edu/~alvarez/teaching/projective-geometry/Exams/problems.html

http://www.math-mit.edu/~kedlaya/geometryunbound/gu-060118.pdf

http://robotics.stanford.edu/~birch/projective

http://www2.maths.ox.ac.uk/~hitchin/hitchinnotes/hitchinnotes.html

http://www.stolaf.edu/people/cederj/Courses.dir/bib-356/index.html#beginning