

Advanced Mathematical Decision Making is proposed as a fourth-year course to follow Algebra I, Geometry, and Algebra II (or the equivalent). Its primary purpose is to prepare students for college majors that may not require calculus, for technical training, or for a range of career options. This course may also be useful to other students as an elective. Basic course instructional materials and supporting professional development are being piloted during 2009–2010, with full implementation available in 2010–2011. For more information, go to www.utdanacenter.org/amdm.

Additional Resources

Note: Some resources in this list are intended for audiences above or below the level of the AMDM course. These resources are included here because they address topics that are in the course’s description and are not traditionally taught in high school mathematics.

Books

Bauer, C. (2008). *Algebra for athletes* (2nd ed.). New York: Nova Science Publishers, Inc.

Center for Mathematics Education (CME). (2009). *CME project algebra 2*. Pearson Education, Inc. (Book produced by the Educational Development Center [EDC], as part of its National Science Foundation [NSF]-funded CME Project)

Consortium for Mathematics and Its Applications (COMAP). (2006). *For all practical purposes: Mathematical literacy in today’s world* (7th ed.). New York: W. H. Freeman and Company.

Crisler, N., Fisher, P., & Froelich, G. (2000). *Discrete mathematics through applications* (2nd ed.). New York: W. H. Freeman and Company.

Fisher, D. M. (2001). *Lessons in mathematics: A dynamic approach with applications across the sciences*. Lebanon, NH: isee systems.

Fisher, D. M. (2005). *Modeling dynamic systems: Lessons for a first course*. Lebanon, NH: isee systems.

Maurer, S. B., & Ralston, A. (2004). *Discrete algorithmic mathematics* (3rd ed.). Wellesley, MA: A K Peters, Ltd.

Internet

Achieve A-E secondary mathematics expectations (draft). (2007). Based on the mathematics benchmarks developed through the American Diploma Project by Achieve, Inc. Retrieved November 18, 2009, from www.therightstuff.amatyc.org/resources/Achieve.Sec.Expectations.Jan07.pdf

American Statistical Association. (2005). *Guidelines for assessment and instruction in statistics education (GAISE) report*, especially Level C. Retrieved November 18, 2009, from www.amstat.org/education/gaise

College Board. (2006). *College board standards for college success: Mathematics and statistics*. Retrieved November 18, 2009, from www.collegeboard.com/prod_downloads/about/association/academic/mathematics-statistics_cbscs.pdf

University of Hong Kong site on statistics, including mathematical utility, probability, and expected value. Retrieved November 18, 2009, from philosophy.hku.hk/think/stat

Mathematical models with applications: Science and engineering module, developed for the Charles A. Dana Center and the Texas Education Agency by the Center for Occupational Research and Development (CORD), the Concord Consortium, and COMAP. Retrieved November 18, 2009, from www.utdanacenter.org/mathtoolkit/mmacd/mma.htm

Texas Education Agency. *Texas essential knowledge and skills*. Retrieved November 18, 2009, from www.tea.state.tx.us/index2.aspx?id=6148