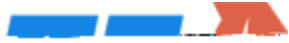


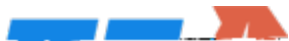
*Approved Innovative Course*

Course: Modern Geometry





- (F) use concepts of projective geometry to explore conic sections.
- (3) c prconic



*Description of specific student needs this course is designed to meet:*

This course provides an opportunity for students to directly connect concepts of art and perspective to advanced mathematical ideas, thus offering relevance for and promoting interest in mathematical concepts.

The study of modern geometry will expose students to new ways of thinking about mathematical concepts while reinforcing traditional concepts in geometry, with the hope that exposure to modern geometry may encourage and inspire students to pursue further studies in mathematics.

*Major resources and materials:*

(1) Experiencing Geometry, 3/E  
David W. Henderson, Cornell University  
Daina Taimina, Cornell University

ISBN-10: 0131437488  
ISBN-13: 9780131437487

Publisher: Prentice Hall  
Copyright: 2005  
Format: Paper; 432 pp  
Published: 07/28/2004

(2) Euclid's Elements (available on-line at  
<http://cs.clarku.edu/~djoyce/java/elements/elements.html> )

(3) Survey of Classical and Modern Geometries, A: With Computer Activities  
Arthur Baragar, University of Nevada, Las Vegas

ISBN-10: 0130143189  
ISBN-13: 9780130143181

Publisher: Prentice Hall  
Copyright: 2001  
Format: Paper; 370 pp  
Available on Demand

*Other Resources:*

*Geometer's Sketchpad (or other dynamic geometry software)*

*Artwork: Images of artwork drawn without perspective (pre-Renaissance) and with perspective (Renaissance – present day).*

