MATH 3200 **Shirley B. Gray**

Students who successfully complete this course will be able to:

Understand the ancient Egyptian, Babylonian, Roman and Mayan number systems and be able to calculate basic operations from these early civilizations;

Explore the beginnings of Greek mathematics focused on Thales, Pythagoras, Hippias, Eudoxus and Nicomachus;

Develop an understanding of modem skills first investigated at the Alexandrian School by Euclid, Eratosthenes, Archimedes and Diophantus;

Appreciate mathematics from both the Middle and Far East.

Gender: and Ethnic studies will include Liu Hui, Hypatia, Abu Kamil and others.

Mathematics from Western civilizations will include, among others, Fibonacci, Cardan, Tartaglia, Napier, Newton, Leibniz, Pascal, Fermat, Bernoulli(s), Euler and Gauss along their signature derivations, or statement thereof.

Each student will present a project either working alone or in a group.

Each student will prepare a final homework project integrating people, publications, developments and quotes.

Students annually visit the Huntington Library to view original, often first editions, of important mathematics titles. This visit might be entitled "Seeing the Great Books of Mathematics."

In summary, MATH 320 is a survey of the History of Mathematics beginning in Antiquity and ending with Gauss. Skill in use of both printed and on-line sources is encouraged.