

Math 130 – Mathematical Origins | January 1-14 2016



Course Description: This course is designed to introduce students to the historical development of mathematics in various cultures. The main focus will be on the mathematics of Ancient Egypt, Mesopotamia, China, India, and Islamic Nations, and will have a special focus on Mesoamerican cultures.

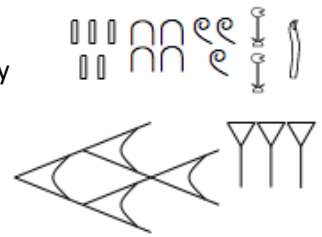


Learning Objectives:

- Demonstrate an appreciation and knowledge of the mathematical contributions of non-European cultures to our current mathematics.
- Understand the strong role a number system plays in the development of math, science and culture.
- Be able to represent numbers in various number systems including Egyptian Hieroglyphic, Mesopotamian, Hindu-Arabic, ancient Chinese numbers, Mayan, and Aztec.
- Know how to interpret dates in the Long Count and convert between our dates and the Long Count.

Required Materials:

The Crest of the Peacock: Non-European Roots of Mathematics (Third Edition) by George Gheverghese Joseph. Paperback: ISBN: 9780691135267 or E-book: ISBN: 9781400836369



Copy of article “Mesoamerican Mathematics”, by Michael P Closs in *Math Across Cultures*, published by Kluwer Academic pgs 205-238.

For non-Spanish speakers: *Mexican Spanish Phrasebook* by Lonely Planet; 3 Blg edition (June 1, 2012) Paperback: ISBN- 978-1742201887.

8 ½ x 11 Journal with a hard cover: This can be a simple composition style notebook, or other form as long as it includes at least 40 pages for your entries. Students will be asked to write journal entries each day related to what they have learned, using specific prompts and guidelines that will be given.

- *This journal is **not** a personal diary.*
- *This journal is for the daily work that will be assigned and graded, thus you should use some other form of notebook for your own daily class notes and notes while at a site that will be put together later into your journal entry about the day.*



The journal will be handed in for grading to instructors periodically during the course as well as at the end of the course. It must be readable and completed by the deadlines given. The journals will be returned to the students during the spring semester after final grades for the course have been recorded.

Attendance: During a travel course a student is expected to participate in all class sessions and activities. Any absence (not due to illness) will usually result in a failing grade.

Places we will visit (tentatively, possibly others):

Huapalcalco, Tula de Allonde, Teotihuacan, Templo Mayor (Mexico City), Tephe (water park), Las Prismas Basalticos, Museum of Anthropology (Mexico City)

Cost: approximately \$2900, depending on airfare and the number of students who sign up. (The number is calculated based on 8 students traveling.) This includes **all** meals, hotels, site visits, and transportation in Mexico.

Important deadlines:

1. \$500 non-refundable deposit due on October 15, 2015 – credit card, cash, check, or money order. ***Use of a credit card will require a 3% transaction fee.*** Deliver to: Extended Education, 2nd floor, Raymond Hall
2. \$1000 non-refundable deposit due on Friday October 30, 2015 – same payment instructions as above
3. Remaining balance due on Monday November 30, 2015 – same payment instructions as above

Critical details:

- You must have a valid Passport in order to travel with us.
- A fee for International Health Insurance will be billed to your Potsdam Student account.
- How do I sign up? - See Dr. Miller (MacVicar 219) or Dr. Madore (MacVicar 211).
- You will need to fill out a late drop/add, but fee will not be charged....it is part of your Fall load so possibly even an overload form, again no issue of approval, but it needs the Dean's signature.
- Be sure the forms get to the registrar soon so you have your seat reserved!
- See Krista LaVack in International Education immediately to determine what forms must be turned in, there will be a few of them!
- Be sure to check to see if you need any vaccinations before we travel, probably not but it is best to check!