MA330 Policy (Spring 2012)

- **Instructor**: Dr. Avinash Sathaye  
  **email**: sathaye@uky.edu  
  **web**: www.msc.uky.edu/sohum
- **Office**: 703 POT (Phone 257-8832)
- **Office Hours**: TBA or appointment. Also, you may come by any other time and I will help you if I am free. I mean this!
- **Textbook**: *No chosen textbook.*
- **Syllabus**: I would go thru various topics discussing the mathematical achievements in the Indian subcontinent from ancient to modern times. The sources are various Sanskrit texts and a few available books in History of Indian Mathematics (or Hindu Mathematics as it was historically called).
- **Structure of the course**: I will pick specific mathematical topics from the various texts. After deciphering what the original text says, we shall investigate possible proofs and connections with developments elsewhere. You will be expected to actively contribute in researching connections with developments elsewhere, either using the internet or available standard history books.
  Some of the mathematics turns out to be interesting and useful (and relatively unknown) even for today. We shall learn it as in a regular Mathematics course with suitable practice and a quiz or a test.
- **Projects**: You are also expected to complete a total of two individual projects on a topic selected in consultation with me. Each project involves a short presentation in front of the class and a written report.
- **Exams**: There will be only one written exam in the middle of the semester based on some of the Mathematical techniques.
  The first project shall be due before the midterm exam and the second project will be submitted in lieu of the final.
- **Quizzes and homework**: I plan to give occasional quizzes and some homework to be submitted. I will try to spread these evenly during the semester.
- **Class participation**: It is crucial that you actively participate in class discussions and research projects. I don't enforce a strict attendance policy, but you are expected to consider attendance as necessary and try to seek permission ahead of time if you have an excuse.
- **Grade**: The two projects and the midterm shall be worth 100 points each. Quizzes and homework shall be worth additional 50 points and class attendance and participation shall be worth 50 points.
  This makes a total of 400 points.
  The final grade shall be on the usual (percentage) scale E(0-59), D(60-69), C(70-79), B(80-89), A(90-100).
- **Advice**: This course is very different from a typical Mathematics course. You should not think of it as a chore to be finished, but an interesting journey into a fantastic world. You should try to use your own imagination and you should be raising your own questions!