

Throughout the program you will be asked to complete a variety of different types of work that will be assessed as part of your evaluation. So that you know what to expect at the outset, these are listed below. You should budget about forty hours a week for program work (including time spent in the classroom).

**Homework**

Homework is an extremely important part of learning this material. There will be homework assignments each week in differential equations, linear algebra and multivariable calculus. You can expect to spend roughly four hours per assignment. The homework will be assessed for completeness and effort and some questions will be corrected. After homework is returned to you please keep it in a separate section of a three ring binder as part of your portfolio.

**Worksheets**

In class you will occasionally break up into workshop groups to complete problems and worksheets. The work you do in groups during workshop activities will not be collected weekly for marking. However, this work will be assessed for effort and completeness at the end of each quarter. Therefore, please complete all workshop questions after class and arrange your worksheets in a separate component of a three ring binder as part of your portfolio

**Computer Labs**

We will be working weekly in the computer lab using Maple® and other software to solve mathematical problems. There will be time to spend on the labs in class, but for most lab worksheets you will need to spend additional time outside of class to complete the lab assignment. Questions should be completed in a Maple® worksheet using the naming convention Lastname\_Firstname\_Lab\_number.ms and posted in our program space on Masu,

**Tests**

There will be a total of three tests per quarter for each subject. There will be both in-class and take home tests. Missed in-class tests or late take-home tests will result in loss of credit unless prior arrangements have been made with me to complete the tests at an alternative time.

**Presentations**

Each student will complete two presentations per quarter; one on a differential equations lab and one on the work and life of a mathematician or physicist that you research. The presentations will be given in pairs and will be assessed by your peers.

- Differential equations lab presentations will be 25 minutes including time for questions. In addition each student should **individually** submit a typed double spaced three-page paper about the topic they presented. The paper should include an introduction, with background and motivation, a body explaining the main results, and a conclusion. Graphs and diagrams should be included where appropriate.
- The presentations on the work and life of a mathematician and physicist will be 15 minutes each, including time for questions. Students should give some historical background and then quantitatively explain one aspect of their work.

**Seminars**

We will have seminars each Monday for the first four weeks on readings from the seminar text. Each student is expected to come class having completed the reading and being prepared to discuss it. For each seminar bring a typed paragraph that addresses a question that arose from the reading that you would like to discuss with the class. You will share these paragraphs with the class.