

One of the goals of scientific inquiry is to understand the processes of nature on a quantitative basis. In pursuit of this goal we create physical models to represent the order we observe, and in turn devise mathematical methods for interpreting and solving these models. This program will provide a thorough introduction to such models and methods. This will include learning a number of new skills, new tools and new ways of thinking as outlined in the syllabus. At the end of the program you should have

- Gained mathematical problem solving strategies and skills, making use of analytical, graphical, qualitative and numerical approaches.
- Learned how to build mathematical models of physical reality.
- Learned to use computer applications to solve mathematical problems.
- Learned to communicate an understanding of your work in both oral and written form.
- Learned to work collaboratively in small groups.
- Learned to take responsibility for your own learning.
- Demonstrated an adequate understanding of the material in the syllabus, including methods and applications.

I will evaluate your work and award credit with these learning objectives in mind. Full credit in this program is contingent on satisfactory understanding of the content of the program as demonstrated on exams, tests, and assignments. The evaluations and the award of credit will also reflect fulfillment of the following expectations:

### **Expectations of the Student**

- Attend all program activities on time and prepared to participate.
- Contact me in advance by phone or email if you will be absent from class or will miss an appointment.
- Take responsibility for keeping up with the most current version of the syllabus and class schedule (changes will be posted on the web site) and, in the case of absences, getting notes and handouts from classmates.
- Complete all assignments and readings on time and with integrity, giving credit to those whose ideas you use or whose words you quote. Plagiarism and cheating are serious academic offenses and will result in loss of credit and possible expulsion from the program.
- Use the classroom facilities and all computer labs responsibly.
- Contribute your share when involved in collaborations and make every effort to communicate necessary information to your team members.
- Abide by the Social Contract and the Sexual Harassment Policy.
- Complete informal self-evaluations at the end of each quarter and formal self, faculty and program evaluations in your final quarter in the program.

### **Expectations of the Faculty**

As your faculty, I agree to:

- Conduct and/or participate in lectures, workshops and labs as needed and attend the activities I expect all of you to attend, unless absent due to illness.
- Review your assignments and evaluate them in a timely manner.
- Be available for conferences with you during office hours or by appointment.
- Respect any differences of opinion or interpretation we may have and be open to your suggestions.
- Abide by the Evergreen Social Contract and Sexual Harassment Policy.
- Complete informal evaluations of you at the end of each quarter and formal ones in your final quarter in the program, in the context of individual conferences.