

**COURSE  
INFORMATION**

Course Title:

Programming for Scientists

Course Description:

For scientists with a need to program, this course will provide a more formal introduction using modern open-source tools (based on the Python programming language).

**TEACHER  
INFORMATION**

Teacher 1

Name:

Luis Pedro Coelho

Email:

lpc@cmu.edu

Major:

Computational Biology

Circle Class: Sr. Jr. So. Fr. Other

Ph.D.

Describe your knowledge in this area, in detail:

I have a B.S. and an M.S. in Computer Science. Since starting my Ph.D., I have been writing science-oriented code.

Teacher 2 (Optional)

Name:

Email:

Major:

Circle Class: Sr. Jr. So. Fr. Other

Describe your knowledge in this area, in detail:

**SYLLABUS  
INFORMATION**

StuCo courses should not duplicate traditionally taught Carnegie Mellon curriculum. Please outline topics to be presented in your course. Use any appropriate format for your outline, and provide as much detail as possible. E.g. Week 1: Topic ijk, Week 2: topic zyx.

**PLEASE ATTACH A SYLLABUS, DRAFTS ARE SUFFICIENT AS LONG AS THEY SATISFY THE REQUIREMENTS**

**MATERIALS**

Please describe any texts/media you might use, and describe their use.

None will be used.

**MIDTERM & FINAL**

StuCo requires its teachers to give a Midterm and a Final. These may be in any form the teacher desires. E.g. written test, project, etc. Please describe a midterm and final, what it will test, and its grading criteria for your class. This may be in any form the teacher desires. E.g. written test, project, etc.

Midterm's Form:

Midterm grade will be based on homeworks

Final's Form:

Project: solve a scientific problem using methods and technology learned in the class

**ASSIGNMENTS**

Please describe any other critical, significant, or major work/projects/assignments. This includes both in class and out of class. E.g. guest lecturers, etc.

**GRADE INFORMATION**

StuCo requires its teacher to give a Pass/Fail final grade for each student at the end of the semester. StuCo also requires its teachers to give some form of mid-course feedback. The final grade does not necessarily have to be based on the Midterm or Final. Please describe how you would decide on a grade (Pass or Fail) for each student, and what types of mid-course feedback you would give.

Grade will be based on homework and project. To pass, a student must be able to solve a realistic problem using programming methods and tools taught in the class.

**LOGISTICS INFORMATION**

StuCo courses are only permitted to run on weekdays, after 6:30pm. Chosen start and end times apply to all days. If two sections are being run, then you must specify meeting days and start/end times for both sections. The meeting days and start/end times can be the same for both sections if you would like. Classes must meet at least once per week. StuCo courses do not run into exam periods. If accepted, you will be given a classroom of appropriate size with appropriate equipment, for your requested time period.

Section A:

Enrollment Maximum:

35

Enrollment Minimum:

4

Section A Meeting Days:

Tue & Thu

Section A Start Times:

6.30 pm

Section A End Times:

7.50 pm

Section B:

Enrollment Maximum:

Enrollment Minimum:

Section A Meeting Days:

Section A Start Times:

Section A End Times:

(Used only if you are one teacher running two sections OR if you are two teachers each running your own separate section)

**MONETARY INFORMATION** Books Required / Multimedia Needs:  
None

Please describe, in brief, monetary requirements of the class. If you require funding from StuCo, another application is required. If needed, please contact the StuCo Committee for more information regarding the funding application.

None

**ADVISOR & FACULTY** Recommendations

Advisor signature:

Robert F. Murphy

*I hereby attest that the above-named student is in good academic standing.*

Faculty recommendation should come from a faculty member who is knowledgeable in the proposed area. If you cannot find a faculty member who knows your subject, then the recommendation should come from a faculty member who knows you well. A single faculty member may sign for both potential StuCo students if he can attest to both students.

**Mission Statement:**

The Student College is being established to provide members of the Carnegie Mellon community with the opportunity to share in educational course based experiences that are not available through regular university offerings as led by Carnegie Mellon students.

I hereby attest that the proposed StuCo course, as described in this Course Application, are in line with the StuCo Mission Statement and Luis Pedro Coelho (StuCo applicant name) and (optionally) \_\_\_\_\_ (StuCo applicant name) is/are sufficiently able to teach this course.

Faculty signature:

Russell Blum

Faculty email:

russellb@andrew.cmu.edu

Faculty department:

Biological Sciences

Faculty signature:

Faculty email:

Faculty department:

(Faculty signature for second StuCo teacher, if applicable)

**APPLICANT SIGNATURE(S)**

I hereby recognize that, if accepted, I will run the StuCo course mentioned in this application, and adhere to the details described in this application and in the StuCo charter as closely as possible. I will abide by all StuCo and Carnegie Mellon dates, times, and deadlines. I also recognize my responsibilities to my future StuCo students and to StuCo to provide a successful and organized class. I will contact StuCo if any major situation arises.

Applicant 1 Signature:

[Signature]

Applicant 2 Signature:

Date:

Sept 12 2008

Date: