

Title: Introduction to Computational Science
Class Hours: M 3:40-5:00 PM in CTC-113
Lab Hours: W 3:40-5:00 PM in CTC-113
Requirements: You must also be enrolled in **COMP-095A-6342**
Office Hours: MTuWTh 11:30-12:30pm, F 12-1pm
Text: *Introduction to Computational Science*, by Shiflet, 1e
Course URL: <http://www.contracosta.edu/CS/murphy/CSE-110/>
Yahoo Group: CCC-ComputerScience-subscribe@yahoogroups.com
Podcast: <http://deimos.apple.com/WebObjects/Core.woa/Browse/contracosta.edu.1273718453>

Section: CSE-110, Sec-5248
Instructor: Tom Murphy
Office: CTC-125
Phone: 235-7800 X4348
Email: tmurphy@contracosta.edu
Units: 2
Grading Option: Student Choice
Method of Instruction: Lecture and Lab

Overview:

This course provides an overview of scientific computing. Its goal is to help students become comfortable using computers to do science and to provide them the computational framework they can use throughout their scientific career. Students will be introduced to topics such as data types and methods, visualization techniques, and numerical integration. Not repeatable.

Grading

Directed Reading Exams	1 point per exam	(15% total grade)
Homework	1 point per assignment	(20% total grade)
Group Project(Lab)	10% per project	(20% total grade)
Midterm		(20% total grade)
Final		(25% total grade)

Grading Scale

Your final **grade** is based on the above grading scheme, as well as any Extra Credit opportunities, which may be provided.

A	90% - 100%	Credit	65% - 100%
B	80% - 89%	No Credit	0% - 64%
C	65% - 79%		
D	50% - 64%		
F	0% - 49%		

Ground rules

- 1) Contents of this syllabus are subject to change with notification.
- 2) I will give you my respect. I expect your respect for all others in the course.
- 3) I will be doing lectures during formal lab time. There is a lot of book to cover
- 4) You are responsible for the material of this course, as assigned in this syllabus, whether or not you are in class, and whether or not I cover it in class. If you don't understand, ask questions: in class, with a tutor, during office hours, or at some time we arrange.
- 5) Assigned Reading Exams are given in the first five minutes of each class. There is no makeup for these exams
- 6) Exams must be taken when scheduled and are open notes. Make up exams will not be given without **prior** approval.
- 7) There will be two Group Projects composed of 2-3 students, assigned by me. There will be one grade for the entire group.
- 8) Lecture and Laboratory attendance is required. I may choose to drop you if you miss more than two classes or labs without prior approval.
- 9) Homework is due in the beginning of class and is not accepted late. Expect to spend at least six hours per week studying outside of class..
- 10) Opportunities for Extra Credit work may be given to stimulate student thinking and improve knowledge of course material.
- 11) I encourage you to work with other people on homework assignments. You or they may be able to explain something more clearly than I say it. However, do not look at anyone else's work or allow anyone to type anything for you.
- 12) Students with learning, physical, or psychological disabilities can discuss their needs with the staff in the DSPS office located in H19.
- 13) Aug 29 last day to add, Sept 14 last day to drop with no grade, and Nov 15 is last day to drop with grade

Tentative Schedule:

Date	Reading Assignments for today	H/W (due next class)	Date	Reading Assignments for today	H/W (due next class)
Aug 20	Chap 1	p11: Ex-1	Aug 22	Chap 2.1	
Aug 27	Chap 2.2	p31: Ex-2-4; p32 Proj-1	Aug 29	Chap 2.3	p49: Ex-2-3
Sep 3	Holiday - Labor Day		Sep 5	Chap 2.4	p64: Ex-1
Sep 10	Chap 3.1		Sep 12	Chap 3.2	p84: Ex-1, Ex-6; p84 Proj-2
Sep 18-20	Intel Developer Forum (substitute teacher)				
Sep 17	Chap 3.3	p93: Ex-3	Sep 19	in lab Chap 3.3	
Sep 24	Chap 3.4	p94 Proj-1	Sep 26	in lab Chap 3.4	
Sep 28	Holiday - Native American Day				
Oct 1	Chap 3.5	p107: Ex-4	Oct 3	midterm Chap 1-3	
Oct 8	Chap 4.1	p108 Proj-1	Oct 10	Chap 4.2	p126: Proj-2
Oct 15	Chap 4.3	p137: Proj-1	Oct 17	Chap 4.4	p146: Ex-2
Oct 22	Chap 5.1		Oct 24	in lab Chap 5.1	
Oct 29	Chap 5.2	p167: Ex-1-2	Oct 31	Chap 5.3	p175: Ex-1-2
Nov 5	Chap 5.4	p186: Ex-1-2	Nov 7	Chap 6.1	p195: Proj-1
Nov 13-15	Supercomputing 2007 (substitute teacher)				
Nov 12	Holiday - Veterans Day		Nov 14	Chap 6.2	p208: Proj-1
Nov 19	Chap 6.3	p221 Proj-1	Nov 21	Chap 6.4	p231 Proj-2
Nov 22-23	Holiday - Thanksgiving				
Nov 26	Chap 6.5	p249 Proj-1	Nov 28	Small Group Reports based on Chap 7	
Dec 3	Small Group Reports based on Chap 7		Dec 5	final Chap 1-7	