### Final Student Survey

Programming for Scientists Lecture 25 (April 14, 2009)

 $\square$  More than twice as productive.

### Abstract

Please fill out this survey. This will help me understand what was good and bad about this class. Try to be as precise and complete as possible. The surveys are anonymous, but I may make some results of it public.

# §1 OVERALL Did this class fulfill your expectations? □ It surpassed them by a mile. □ It surpassed them. □ It fulfilled my expectations. □ I was a bit disappointed. □ It was a total waste of my time. The goal of this class was to make you 20% more productive. How would you estimate the productivity increase from the methods and tools you learnt? □ I'm actually a worse programmer now. □ Zero. □ Just a bit, less than 20%. □ Around 20%.

If you replied "Zero" or "Just a bit," why do you think so:
$\square$ I still haven't gone over the initial energy barrier of using new tools, but I think they are going to be helpful in the future.
$\Box$ The tools don't help with the kind of problems I work on.
$\Box$ I didn't really understand what was being taught.
Or something else:
1.1 Expectations
Here are the particular expectations that I had listed on the website. Let me know if you think that you fulfill them: (i) Software carpentry: source control, unit testing, profilers. Students should know how to use Subversion, nosetest, and the Python profiler as well as understand the concepts behind these tools (which will enable them to use them with a different implementation).
$\Box$ I understand this perfectly.
$\Box$ I understand most of it.
$\Box$ I have a vague idea.
$\Box$ I don't really get it.
$\square$ What are you talking about?
Additional comments:
(ii) Modern programming paradigms: object oriented. Students should know how polymorphism works and understand when and why it can be useful.
$\Box$ I understand this perfectly.
$\Box$ I understand most of it.

	$\Box$ I have a vague idea.
	$\Box$ I don't really get it.
	☐ What are you talking about?
Α	additional comments:
-	
•	ii) Students should know how floating-point numbers are represented a neir limitations. Detailed knowledge of specific formats is not required.
	$\hfill\Box$ I understand this perfectly.
	$\hfill\Box$ I understand most of it.
	$\Box$ I have a vague idea.
	$\Box$ I don't really get it.
	☐ What are you talking about?
A	additional comments:
-	
fo	(v) Technologies: Python including numpy. Students should be able to cortably write medium-sized programs (a few thousand lines of code) us nese technologies in an effective way.
	$\Box$ I understand this perfectly.
	$\Box$ I understand most of it.
	$\Box$ I have a vague idea.
	<ul><li>☐ I have a vague idea.</li><li>☐ I don't really get it.</li></ul>

## 1.2 Particular Technologies & Tools

These are the tools that were taught in this class. I would like to know if you think they were useful.

Would you use the following tools/technologies on your projects?

	Never	Sometimes	On Most Projects	Always
Python				
shell				
testing				
version control				
debugger				
numpy				
matplotlib				
sqlite				
Qt				

### §2 Homeworks & Project

Did you think that the homeworks were a good use of your time?
$\square$ Yes, they helped a lot.
$\square$ Generally helpful.
$\square$ Mixed bag.
$\square$ Mostly a waste of time.
$\hfill\square$ Not helpful—just something more to do.
Is the project getting you to understand the material better?
$\square$ Yes, is helping a lot.
$\square$ Generally helpful.
$\hfill\Box$ Mixed bag.
$\square$ Mostly a waste of time.
$\hfill\square$ Not helpful—just something more to do.
$\hfill\Box$ I haven't worked enough on the project to answer this question.

Any further comments on homeworks	and project?
§3 Bugs	
In this section, I ask what you believe the more important sections of the que	e was wrong with this class. It is one of estionaire.
3.1 Missing	
What do you think was missing in this technologies, techniques, or subjects.	s course? Feel free to mention particular
3.2 Too Much	
What did you think was too much in that you didn't see the point of?	this class? Was there a subject/lecture

# 3.3 Badly Explained

Wer	e there any topics you felt were particularly badly explained (hopefully not
	whole course)?
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§ <u>4</u>	Comments
Plea	ase add any other comments you feel might be helpful.