• **Question 1: How can I run Python and Biopython on my Windows machine?**

Answer: While we strongly encourage students to use the Macintosh or Windows machines in the Social Sciences I computer lab because all of the required software for the course has already been loaded and configured, some students may wish to write code and run Python on their own computers. On a Windows machine, neither Python nor Biopython comes installed with the operating system so you’ll need to follow the instructions below to get everything setup on your machine. Please follow the order below so that everything goes as smoothly as possible (thanks to Edward Liaw for the instructions for Windows).

- Python 2.7.1 (avoid 3.x):
  - [32-bit](http://32-bit), [64-bit](http://64-bit)

- Numpy:
  - [32-bit](http://32-bit) — follow link and find numpy-1.5.1.win-amd64-py2.7.exe

- Scipy:
  - [32-bit](http://32-bit) — follow link and find scipy-0.9.0.win-amd64-py2.7.exe

- Biopython:
  - [32-bit](http://32-bit) — follow link and find biopython-1.56.win-amd64-py2.7.exe

• **Question 2: How can I run Python and Biopython on my Mac?**

Answer: While we strongly encourage students to use the Macintosh machines in the Social Sciences I computer lab because all of the required software for the course has already been loaded and configured, some students may wish to write code and run Python on their own computers. On a Mac, Python comes installed with the operating system so you’ll only need to know what version you have for subsequent setup. To install and run Biopython, however, requires a number of software packages that haven’t been installed with your system, and these packages depend on one another. Please follow the order below when installing so that everything goes as smoothly as possible.

First determine what operating system version is running on your computer (e.g. 10.6.X “Snow Leopard” or 10.5.X “Leopard”, where X is a number from 1–9). Next determine what version of Python you have installed (e.g. 2.6.X or 2.7.X, where X is a number from 1–6). After determining what versions of software you have, install the programs listed below in the order they appear—making sure to match the version number you have! Please follow the order below when installing so that everything goes as smoothly as possible.

- Xcode:
  - version 3.2.6 for OSX 10.6, version 3.1.3 for OSX 10.5

- gfortran:
  - version 4.2-5664 for OSX 10.6, version 4.2-5577 for OSX 10.5

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1 To determine what version you have, click the Apple icon on the upper left corner of your computer screen and select “About this Mac”.

2 To determine what version of Python is installed open the “Applications”→“Utilities”→“Terminal” and then type python -v at the command line when a terminal window opens.

3 To run an extremely basic test of your installation, open the “Terminal” program (see note 2 above) and then type python at the command line to start the interpreter. Once the interpreter is loaded, type “import numpy” followed by enter/return, “import scipy” followed by enter/return, and “from Bio.Seq import Seq” followed by enter/return. If everything installed properly, then no error messages will appear.
– Numpy:
  python 2.7.x, python 2.6.x
– Scipy:
  python 2.7.x, python 2.6.x
– Biopython:
  http://biopython.org/DIST/biopython-1.56.tar.gz
  Double-click on the file, which should produce a directory called “biopython-1.56”. Move this directory to your desktop. Open the “Terminal” program under Applications→Utilities→Terminal and then type the commands below, each followed by the enter/return key:

  cd ~/Desktop/biopython-1.56
  sudo python setup.py install

• **Question 3: Can I audit the course?**
  Answer: Yes! But please let Dr. Kidd know first. We just want to make sure every registered student has a computer available in the lab. If space fills up, we may ask you to bring a laptop to the computer labs or to class. Currently, there is plenty of space, so please join us.

• **Question 4: Can I still register for the course?**
  Answer: Yes! If you need registration codes please ask the instructor.

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4The password after the second command is whatever password you have for your computer.