E3B Computing Essentials: Online version New Student Orientation, Fall 2005 By Todd Osmundson and Scott Cardiff

1. Academic information services (AcIS)

Your first stop for all things computing at Columbia. Computer support, software (http://www.columbia.edu/acis/software/index.html), and training. AcIS offers Norton Antivirus software free of charge to all Columbia students; download from the website. If you don't have this or other current (updated weekly) virus protection software on your computer, you shouldn't be getting anywhere near the Columbia network. AcIS now offers PestPatrol, a spyware search tool as well. Spybot Search and Destroy (http://www.safer-networking.org/en/download/) and Ad-Aware are two other useful PC-platform programs for finding and destroying spyware on your computer. EndNote bibliographic software, file transfer (WinSCP3 or Fugu), telnet (SSH PuTTY or MacSSH/MacOSXTerminal) and web browsing software (don't use Internet Explorer and manage cookies carefully) are also available free of charge. You might also find it useful to have a personal firewall on your computer (eg. Kerio, www.kerio.com); this can even prevent program launches. Please heed the University's warnings on peer-to-peer sharing of copyrighted material; Columbia's network is not free from copyright holder scrutiny, and Columbia students using the CU network and the academic Internet2 network have recently been named in lawsuits filed by the Recording Industry Association of America.

Each student also has a free print allowance of 20 pages per week from any AcIS public printer (in computer labs and libraries. You can set up your computer to print remotely to any of the AcIS printers; see the AcIS webpage to find out how. If you are TA'ing a course, you can apply for a free TA account, which allows up to 100 pages of printing per week and 80 Mb of network file storage (regular accounts allow 20 Mb); see the AcIS webpage for information and downloadable application form.

2. www.columbia.edu

Manage your student account and check grades online (Student Services Online, or SSOL), check course availability via the online Directory of Classes, check final exam schedules and academic calendars via the Registar's page, check the University Events calendar, etc.

3. CU Security

Keep your laptop safe! Columbia Security (lower level of Low Library) offers computer locks (approximately \$25), PC Phone Home and Mac Phone Home software (if your computer is stolen, the software sends a message revealing the user's location the first time the computer goes online), and free identification engraving. Theft of unattended laptops, iPods, etc. is near-epidemic in libraries, coffee shops, restaurants and other public areas around here, so protect your stuff.

4. The departmental listserves and E3B electronic bulletin board

E3B graduate students have set up two ways to communicate with one another electronically. The departmental listserves allow a student to send a mass e-mail to a group of student e-mails simultaneously. To send an e-mail to all E3B M.A. students, use the address [address omitted for online version]; to send to all E3B PhD students, use the address [address omitted for online version]. Please note that the listserves do not allow sending attachments (this is a University Computing policy); postings that contain attachments are automatically deleted by the system. Please use the listserves judiciously in order to avoid filling people's inboxes unnecessarily – reserve for announcements of a time-sensitive nature.

The E3B bulletin board ("E3B3") allows postings in the form of threads, where other students can respond to posted items. Access E3B3 by visiting the website https://www1.columbia.edu/sec/bboard/e3bgrads/threads.html. You will be asked to login using your UNI and password. E3B3 can be used for announcements of a less time-sensitive nature (e.g., items for sale, interesting news items, etc.) or discussions (e.g., questions about courses, requests for borrowing books, housing-related queries, etc.). E3B3 can be used for just about any topic –

visit the Archive pages to look at past threads. We often post our list of truly available classes and some comments on them on this board, as well as lists of courses relevant to the Ph.D. Environmental Policy Certificate and M.A. policy requirements. Both the listserves and E3B3 are student-access-only, so they can be used for students to communicate openly with other students; professors and administrative staff do not have access.

5. Library resources

The CU library website offers a number of essential tools for conducting research, including electronic databases, e-journals, and interlibrary loan requests. You can also manage your CU library account (e.g., renew books, check due dates and fines, etc.) online. The main library portal can be accessed at: http://www.columbia.edu/cu/lweb/. Learning these tools now will save you a lot of time later!

Columbia's e-journal holdings are rather extensive; you can find many of the articles that you need (at least in terms of recent articles) without leaving your desk. Many e-journal sites include options for downloading citations in EndNote format that can be imported directly into your EndNote library. The library website also has e-books available for viewing.

Columbia also subscribes to a large number of online literature search databases. You can search for particular databases, or browse by subject area. Some particularly useful databases are:

- ISI/Web of Science and Biological Abstracts (general)
- Zoological Record (zoology)
- Agricola (plant and agriculture references)
- ProQuest Digital Dissertations (available through the databases menu) has abstracts of Ph.D. dissertations. Dissertations are available as pdf files for dissertations published after 1997; some are available free of charge, others require a credit card payment.

Many of these databases allow you to directly access pdf files for articles that Columbia has in its online holdings. If you don't know how to do searches using boolean operators, we would highly recommend learning to do so. The library's short course on "Database Searching Essentials" is a good place to start.

Another good online resource is Google Scholar (http://scholar.google.com), which allows searches of scholarly literature online and includes links to pdf files of articles where possible.

You can request books online that are unavailable at Columbia by using:

- Borrow Direct (books from a smaller network of libraries)
- Science Fast Track (articles) and
- Interlibrary Loan (books and articles). Before submitting a request, check the online library catalog (CLIO) to make sure that Columbia doesn't have the book (including e-books). Articles (or books) that may not be available electronically or available at all from Columbia may be available through the American Museum of Natural History catalogue (http://libcat.amnh.org/) or the NY Botanical Garden (http://librisc.nybg.org/screens/opacmenu.html). Although you won't be able to download the files unless you visit those institutions or are affiliated with them, colleagues might be able to get them for you.

6. Computing classes

Both the library and AcIS offer short workshops for learning software, Unix, web design, etc. Two particularly useful courses teach you to use EndNote (bibliographic software useful for storing references and creating bibliographies automatically) and Photoshop (graphics software, useful for preparing images and figures for manuscripts and web pages) – if you don't know how to use these two programs, especially EndNote, we would highly recommend learning. Course listings can be accessed at http://www.columbia.edu/cu/lweb/services/workshops.html (for library offerings) and http://www.columbia.edu/acis/training/ (for AcIS offerings).

7. Courseworks (http://courseworks.columbia.edu)

Courseworks is CU's online course management software. Instructors can post syllabi, contact info, assignments, articles and other documents, and grades for students to access. Class e-mail and discussion capabilities allow easy communication between students. For many classes, Courseworks is the primary means of outside-the-classroom communication between the

instructor and students, so check your course pages carefully and often. If you are the TA for a course, you will most likely be expected to post assignments, syllabi, and reading files to Courseworks; the Center for New Media Teaching and Learning (CNMTL) offers instruction and workshops to teach you how. Note that the 'post multiple files' option can speed up posting files under the 'class files' section if you're TAing.

8. Unix and Columbia networking

Columbia's unix servers allow students space for temporary file storage and transfer. You can also create personal web pages and store the files on the Columbia network.

- a) Use WinSCP3 or Fugu (Macs) to transfer files to your cunix account; to set up file transfer (and SSH), the address is cunix.cc.columbia.edu -- you can do this for storage when between computers or in order to send attachments if using Pine
- b) To use Pine for e-mail, login to cunix with your SSH program (see software above); the address again if it doesn't come up automatically is cunix.cc.columbia.edu. Once you've logged in, type 'pine'. Pine is all text-based but seems faster and easier than Cubmail to many users. Instructions for keys are at the bottom of the Pine page. Saved attachments go to your cunix account and you can download them (see (a) above). You must upload attachments (see (a) above) seperately (DEMO for attachments)
- c) Personal web pages; pages you want publicly posted under your free account should go in the 'public_html' folder on your cunix account (index.html directly in that folder, then can have other folders too). These pages will take up some of your allowed account space (out of 20Mb for MA students at least unless you pay for more; 80Mb for Ph.D. students while TA'ing); pages show up on the web under 'http://www.columbia.edu/~<your uni>/'. there are free AcIS courses on web publishing.
- d) Scratch directory for large file temporary transfer: if you have very large scanned image files or other files that you need to transfer to another computer, one option is to use the little-known 'scratch' directory. You have to transfer relatively soon, however, as the directory is allegedly regularly erased. To get to it, just navigate up from your account directory (your uni) in your file transfer program, or use 'cd ..' and 'dir' commands from your account in unix to find it. It should be under /hmt/ or /hmt/chinchin/ or something along those lines.

9. Funding sources, Office of Projects and Grants (http://www.columbia.edu/cu/opg/) Some sources of grants:

- 1) The big ones: NSF graduate research fellowship, EPA STAR
- 2) OPG site http://www.columbia.edu/cu/opg/fund.html, Rascal sources (https://www.rascal.columbia.edu/)
 - 3) Earth Institute page sources

(http://www.earthinstitute.columbia.edu/education/fundingorganizations.htm) [unfortunately this appear very incomplete unless you're looking for zoo money... ask other students in your discipline for more sources]

- 4) CU travel grants and others—see financial aid office
- 5) E3B list: from the E3B homepage, under the "Students" menu, navigate to the "Funding Sources" tab. This list will be linked to the E3B GSC webpage when the new site comes online.

Dealing with OPG and Rascal (https://www.rascal.columbia.edu/):

- 1) Location: downstairs in Room 254 Engineering Terrace
- 2) Steps:

Make sure that you have an animal care protocol or other relevant protocols filled out in Rascal (see Rascal main page—'Compliance')

- a) Under 'Processing Contracts and Grants', 'create a proposal' and fill out all pages of proposal and register it
 - b) Notify approvers

- You approve it; chair and PI (CU person) approve it; PI finalizes it
- d) OPG Program Officer logs in proposal; PI finalizes proposal and files proposal e) Update conflict of interest form if not up to date (main Rascal menu)
- Funds go from funding source to OPG/some other world to E3B (Lourdes and Maria) f) to student (receipts and forms required)