10 Computing Requirements for Students

François Briatte
June 8, 2018

This document is part of the "Computing Advice for Students" series. It is a prequel to "10 Computing Tips and Tricks for Students" and "10 Additional Computing Tips and Tricks for Students", and contains a few recommendations that are not repeated in those two documents.

Part 1: Computing

1. Keeping track of university

- Use some form of **agenda** or calendar application.
- Bookmark your **university portals** and important pages.
- Use a **specific, secure browser session** for university-related work.
- Use a **specific user folder** to store study material.

Note – Other documents in this series will come back to Web browsers at several points.

2. Writing proper emails

- Use a **proper email address**, not a pseudonym.
- Set up your email to show your **full name** as the sender.
- Use **email filters** to stay on top of your inbox.
- Use a **sensible email signature**.

Note – Politeness and correct language are not computing requirements, just standard requirements of communication between human beings.

3. Downloading and archiving

- Learn to use your **browser bookmarks**.
- Learn how to **print to PDF** format on your system.
- Learn to use Perma.cc and [Save It Offline][save-it-offline] to save Web pages and videos.
- If you are tech-savvy, also learn about wget, jDownloader and youtube-dl.

Most importantly, ***stay organised*** – rename files to sensible names, and keep folder hierarchies to the simplest scheme that you can come up with.

4. Keeping one's laptop fast enough

Read **"10 Ways to Make A Computer Painfully Slow and Unusable"** after you are done reading the main documents of this series.

5. Saving laptop battery life

To spare your laptop battery:

- Close your **Internet** (Wi-Fi) connexion.
- Close memory- and/or CPU-**intensive programs**.
- Lower your **screen brightness** to 50%.
- Read the material for Tip #4 (see below).

Memory- and/or CPU-intensive programs are covered in the [document][slow-pdf] linked to in the previous tip. One if its recommendations that applies here is to use a plain text editor instead of a word processor (e.g. Microsoft Word) to take notes in class.

Part 2: Research

6. Searching for academic material

- Learn to use **Google Scholar** and other academic search engines.
- Use your **course readings**, including 'additional' ones from bibliographies.
- Use your **university library** to its full extent.
- Learn about **academic journals**, and get familiar with a few of them.

Important – Academic integrity requires that you will be able to cite, and possibly provide, your sources, so save them and do not 'copy-paste' material without making a proper citation to the source.

7. Citing and formatting references

- Take a look at the **citations** in your course readings.
- Take a look at the **references** listed at the end of your course readings.
- Learn about the **Harvard 'author-year' bibliographic style**.
- Consider using a **reference management** program like Zotero or Mendeley.

Important – remember the academic penalties for plagiarism, including 'not knowing how to cite properly' and self-plagiarism.

8. Finding saved material

- Did I already tell you about **naming your files** properly?
- Did I already tell you about **organising your folders** as simply as possible?
- Learn to use **quick search** (e.g. Spotlight on Mac)
- Learn to **search by creation/modification date** or by file format

Tip #3 of "10 Computing Tips and Tricks for Students" will tell you about 'launcher' programs that vastly improve searching for disk files or looking for information online.

9. Evading uninteresting material

- Haven't your read enough **clickbait** in your life already?
- Do you *really* need to read that many **media 'articles'** (i.e. badly rewritten press releases) a day?
- Do you gain anything from spending 2+ hours per day on **social media**?
- Are you watching **online videos** like old people used to watch soap operas on TV?

Last, are you sure that the last course reading that you decided to skip is as uninteresting as you think it is? Are you not at university specifically to learn to read – and, in a few years, to write – complex, long arguments written in some form of 'technical' language?

10. Finding interesting material

- Your teachers do their best to pack **course syllabuses** with interesting material.
- Try a few **'long-form' publications** like *Le Monde diplomatique* and the *The Atlantic*.
- **Youtube** is a great resource once you start looking for proper conferences and talks.
- **Blogs** (and among them, scientific blogs) are often cosy and fun.

Many of the points listed in this overview are covered in further documents of this series. You should now head to "10 Computing Tips and Tricks for Students" for some more focused advice.