Copyright:

The 1886 Berne Convention rolled into WTO TRIPS (Trade Related aspects of Intellectual Property Rights) in 1994. The US didn't sign the Berne Convention until 1989. From 2002 we are a party to two extensions plus the WTO itself. The convention effectively means an automatic world copyright, with local variations.

Extensions: Digital databases are now covered, even when the original entries (e.g. bibliographic citations) are not themselves copyrighted. Computer software is now covered, and breaking the code is now illegal.

By rolling BC into TRIPS, China and others now are signatories; that's a benefit of broad trade agreements, as they probably would not have signed on their own. In the old days, Taiwan refused to sign and printed pirated editions of US textbooks. As a result, in the 1970s US Customs Agents went through the luggage of students coming from Taiwan looking for books.

At one time authors were required to explicitly claim copyright, and to send a copy to the Library of Congress. Now copyright is automatic, though it helps to assert a copyright claim.

The basic duration is the author's lifetime plus 50 years. In 1976 this was extended to 75 yrs for "corporate authorship" just in time to cover the 1928 Disney short *Steamboat Willie*.

The "Sonny Bono Copyright Term Extension Act of 1998" (a.k.a., the Mickey Mouse Act) unilaterally extended US copyright by 20 years to 70 years for a regular work and an incredible 120 years for a corporate work, effective retroactively, though works out of copyright had to be re-registered. Why retroactive? Congress didn't pass it quickly, and that provision allowed Disney to extend the copyright of Mickey Mouse another 45 years. The US Constitution specifies that copyrights and patents must last for a "limited time," leaving Congress free to set very long but still finite limits.

The Mickey Mouse Act clarified that unpublished works enter the public domain after 25 years, so if you write the Great American Novel, don't wait too long to get it published (or self published in a limited edition, sending one copy to the Library of Congress to validate the claim that it really is a publication).

These US copyright provisions are not part of the WTO – in countries that follow the WTO minimum standards Mickey Mouse is now in their public domain. You can create or rebroadcast old Walt Disney films and use their storylines to create remakes. **Don't try that in the US, and don't dangle Disney character figures when entering US customs**. Disney employs lots of lawyers and prosecutes aggressively; their pockets are deeper than yours, and you **will** lose. Indeed, it's illegal to watch Russian adaptations of Mickey Mouse inside the US, even if Disney has a hard catching you.

"Fair Use" is allowed but needs to be constrained; specific rules vary a fair amount from country to country, an issue with international interlibrary loan. Japan informally interprets fair use as copying "no more than 50%" which is awkward when articles are less than 2 pages … are libraries obliged to black out half??

Trademarks:

The Mickey Mouse character itself is a trademark. They last as long as the owner of the trademark continues to use it. So don't paint MM on your daycare center wall without buying a license from Disney … and this is *not* a hypothetical example.

Patents:

US patent law dates to 1790, based on the provision for patents in the US Constitution, which in turn built on British precedents. Jefferson was the first patent office – he personally "examined" patent applications while President. (As you might surmise, there weren't many!)

The Industrial Revolution made international enforcement meaningful. The first agreements was the Paris Convention of 1883, which evolved into the WTO TRIPS.

Previously US patent law was idiosyncratic in terms and manner of issue; now it is uniform with the WTO as 20 years from filing (with a special extension from date of FDA approval for pharmaceuticals). At one time a patent application had to be accompanied by a working model; now a description "sufficient for an appropriate specialist to make it" is deemed adequate. That does not require all the details to be spelled out, leaving room for trade secrets.

Patents are only issued to persons, but holders are free to assign their rights to (for example) their employer, and employers can require that inventors do so.

Economics:

Mandatory licensing

The social benefits of innovation come from **use**, but strategic private benefits may come from **blocking use**. This results in a tension between patent length and the benefits to society. In theory we would like to have the length set industry by industry as a function of how hard or costly something is to bring to the point of patent, adjusted for average social benefits in that industry. That's unrealistic, and in practice patent law assumes one size fits all.

Again, "disclosure" is part of a patent: they are *not* secret. This stimulates **attempts to design around patents**, which can be excessive relative to benefits (excess R&D) but can stimulate technical advance and (more important) changes that enhance commercialization and the development of markets. The relative merits are empirical questions.

In some fields such as semiconductor manufacturing, cross-licensing is pervasive. There are lots of players, lots of specialized equipment, and you need access to everything or you can do nothing. In some industries there are patent pools, every puts their patents in the pool, and all can use (though some members may be "more equal than others").

Patent races also occur, when for example there is a new biochemical discovery that all of pharma seeks to build upon. Only the first firm to file receives a patent, and a patent race can generate a lot of duplicative, wasteful R&D.

utility models: US does not have a "minor patent" system, but many countries do for improvements to machinery and production processes. That's because the specifics of patent law generally exclude minor, obvious improvements. Such "utility" patents are very narrow and short in duration. But it does give a company the ability to keep others from copying a machine design that isn't sufficiently novel to qualify for a full-fledged patent.

Patent breadth issues: US patents are "broad" while those of most other countries are "narrow" – this is partly a matter of legal interpretation, and partly administrative practice. Countries with "narrow" patents tend to have many more patents than the US for a given technology.

The propensity to patent: varies widely across industries, making empirical work tricky. Chemical companies can patent each new compound and resin, resulting in large numbers relative to other industries.

Trade secrets: not everything that can be patented is...firms often prefer not to disclose new ideas. So if someone does steal secrets – the Google software engineer hired by Uber – then a company has to bring a criminal case of theft of personal property, which is hard to prove in court.

Fair Use (from Wikipedia which with attribution allows use**):**

In the US, the fair use doctrine permits some copying and distribution without permission of the copyright holder. Such provisions however vary from country to country, and different libraries or universities may their own internal draw differently, to discourages patrons and students from going too far and getting the library/school embroiled in a lawsuit over copyright violation. (This is not hypothetical: W&L has been forced to take down material on university and university

sponsored (e.g., class-related) websites. The US guidelines focus on (i) the purpose and character of your use, (ii) the nature of the copyrighted work, (iii) what amount and proportion of the whole work was taken, and (iv) the effect of the use upon the potential market for or value of the copyrighted work.

Posting or paraphrasing a single paragraph of a New York Times article is fine, putting most of it in a blog post is not. Ditto taking multiple graphs from one web page and pasting it into your own. However, if the image is "live" with its own URL so that you can link to it, then there's less problem – the URL is public, and you have effectively given attribution. Nevertheless, at W&L good practice is to explicitly cite your source.

Practice is not uniform. In Canada, since 1999 legislation expressly permits copying for personal use. In Australia, the fair dealing exceptions under their Copyright Act 1968 are more limited to research and study; review and critique; news reportage; and the giving of professional (e.g., legal) advice.

In the United States the AHRA (Audio Home Recording Act Codified in Section 10, 1992) prohibits action against consumers making noncommercial recordings of music, in return for royalties on both media and devices plus mandatory copy-control mechanisms on recorders. That is, hardware makers are supposed to pay. Since we no longer use cassette tapes, that system has broken down. Don't expect to get rich as a musician, at least from your music. Logowear, your share of the "gate" at concerts, movie rights – well, not many make it to the big time.

Later acts amended copyright law so that there is no general rule permitting (for example) 10 copies or fewer. Doing a handout for one class in one term seems to be OK. Using the same handout in multiple terms is not – faculty are supposed to create a course pack, and staff then get copyright permission and make any relevant payments. And charge you for it.

However, providing a link to an article available in a database is fine. So as long as your prof doesn't print it out for you, well, it's your own personal fair use for study and research. Copyright law faces a moving target!

Portions of this draw upon entries in Wikipedia, but I have not quoted any content verbatim.

Portions draw upon personal knowledge & snippets in textbooks, that is, my own research.

Therefore I assert copyright over this material!