

## Technologies – Instructor Notes

For a sophomore seminar class, for physics majors, I have asked students to prepare either a paper or a talk on one of the technologies listed. This list contains just a few hints – names, companies, that I found in a few minutes of googling.

The papers are 4-6 pages double spaced, the talks are 5-10 minutes. They choose whether they'd prefer a talk or a paper.

Students are concurrently taking a course called Modern Physics, where unfortunately “Modern” means circa 1900 to 1910. This assignment is a small attempt to make students aware of **this-generation** physics and how this physics impacts things we all use daily.

The assignment deliberately focuses on technologies developed and patented in industrial settings rather than academic ones. I am encouraging them to see the value and the fun of intrapreneurial corporate research.

My instructions to students include:

*focus your paper or talk on the technology, the people, the history, the legal issues - whatever aspect you like. It does not necessarily have to be heavy on the physics; it's ok to write a paper a non-scientist could read and enjoy.*

Verbally, I encourage them to do a non-technical presentation or paper – I want to hear “the story” - the people, the patent issues, the accidents that led to the discovery, etc. Sophomores are not prepared to delve into the technical side of the underlying physics, so it's important to emphasize that their presentation or paper should NOT focus on the physics, but the people, the company, the intellectual property, etc.

These have turned out to be a lot of fun, particularly the oral presentations, as we all get a chance to hear the back-story on some very interesting technologies. I've used this 4 semesters over two years, with good success.