# Chapter 1 - Introduction

## 1.1 About this course

From *The Information* by James Gleick, published in 2011:

> As it happened, 1948 was when the Bell Telephone Laboratories announced the invention of a tiny electronic semiconductor, "an amazingly simple device" that could do anything a vacuum tube could do and more efficiently. It was a crystalline sliver, so small that a hundred would fit in the palm of a hand. In May, scientists formed a committee to come up with a name... *Transistor* won out. "It may have far reaching significance in electronics and electrical communication," Bell Labs declared in a press release, and for once the reality surpassed the hype. The transistor sparked the revolution in electronics, setting the technology on its path of miniaturization and ubiquity, and soon won the Nobel Prize for its three chief inventors. For the laboratory it was the jewel in the crown. But it was only the second most significant development of that year. The transistor was only hardware.

This will be a course about software.

This is an introductory course in computer science with an emphasis on software development. Basic concepts in computer science, including some details about computer hardware, will be covered, but most of the course will be about writing computer software.

We will begin the course with software development in Python. If all goes well, we will continue second semester with web development in HTML, CSS, Javascript, and PHP. If those terms and acronyms don't mean anything to you at the moment, don't be concerned. They will be covered in detail, but there are a few preliminary items to cover first.