

CENG 113

Programming Basics

Introduction

People

Lecturer:

- Buket Erşahin

Course assistants:

- Yağız Nalçakan
- Samet Tenekeci
- Leyla Tekin
- Hüseyin Ünlü

Course Rules

- Every week: 3 lectures of 45 minutes + 2 hours of lab
- Attendance **WILL** intrinsically play a role in the final grading.
- All kinds of cheating, copying and plagiarism is prohibited.
 - Group work is not allowed for homeworks. Copying from another student or from the internet will result **NOT in invalidation but in PENALTY.**

Course Rules

- Questions and comments are **ALWAYS** welcome during the lectures and the labs.
- Office hours are strict and to be respected.
- Lab attendance is **MANDATORY!**
 - Moderate group work during the lab is allowed but everyone is expected to solve the exercises on **their own computers.**

IMPORTANT!

CENG 113 is a prerequisite for **CENG 112** and **CENG 211**.

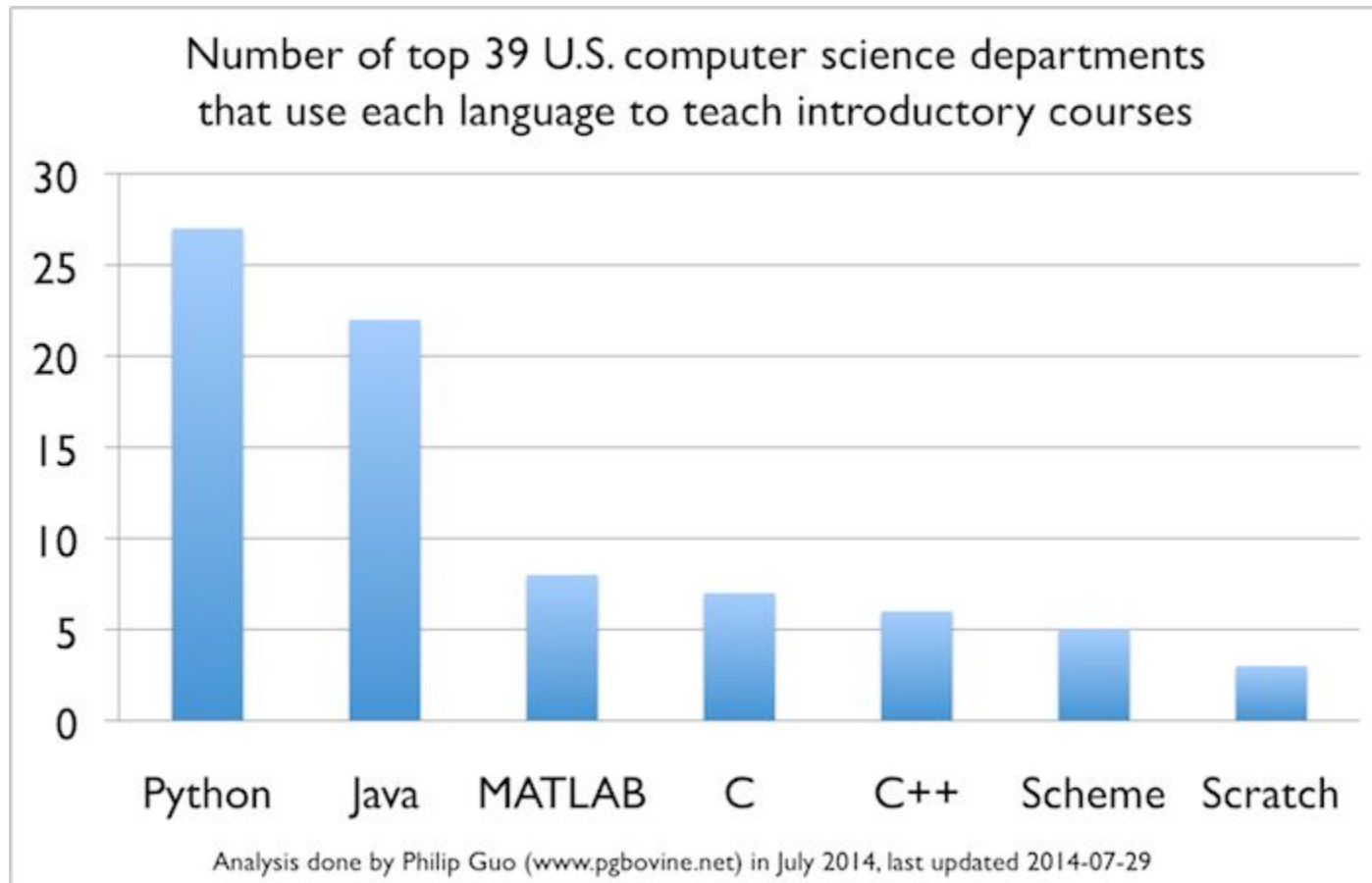
Course Objectives

- Learn to devise and use algorithms
 - Problem solving
 - Implementation (programming)
- Computer programming fundamentals:
 - Sequence, decision, repetition, syntax, functions, procedures, parameters, arrays, design, and style.

Course Topics

- Way of problem solving using algorithms
- Way of programming
- Variables, expressions and statements
- Strings
- Functions
- Conditionals
- Iteration
- Lists
- Recursion
- Files
- Sorting
- Searching
- Classes

Course Language: Python



Course Resources

- **Reference book:**

“Think Python: How to Think Like a Computer Scientist” by Allen B. Downey - greenteapress.com/wp/think-python-2e

- **Supplementary resources:**

www.learnpython.org

www.diveintopython.net

interactivepython.org/courselib/static/thinkcspy/index.html

Course Output

By the end of this semester, you will:

- Be able to solve problems using algorithms
- Know programming in small
- Be able to code in Python
- Be able to apply to [Google Summer of Code 2021](#).

