Introduction to Computer Science

Course Code			
Class Times	Mon/Wed/Thu 9:00~12:00	**Classroom**	Bldg. 301-203
Equivalent Year Level	1~2	**Course Credit**	3

Instructor I	Taewhan Kim	Sessions	1-14
Office	301-603	**Email**	tkim@snucad.snu.ac.kr

❏ Instructor's Profile (Sessions 1-14)

Taewhan Kim
He has a broad knowledge of computer science as well as electrical engineering, and experience in teaching and research over 20 years. He is mainly working on applying computer algorithmic and computing theories to many important optimization problems of the hardware synthesis for very large scaled integrated (VLSI) circuits and systems. He received Education Award in 2016 from Seoul National University, best teaching award in 2015 from School of Electrical and Computer Engineering, and Shin-yang Award in 2006 from College of Engineering for outstanding research. His website is *http://ssl/snu.ac.kr/~tkim*.

Education
Ph.D. in Computer Science, University of Illinois at Urbana-Champaign, USA
B.S. in Computer Science and Statistics, Seoul National University

Expertise
- Design methodology of electronic circuits and systems
- Embedded system design and verification
- Design automation software tool development

Most Recent Works

- Clock and power delivery networks design for mobile chips
- Research on neuromorphic computing chip architectures

❏ Course Information

Course Description	Python is a language with a simple syntax, and a powerful set of libraries. It is an interpreted language, with a rich programming environment, including a robust debugger and profiler. While it is easy for beginners to learn, it is widely used in many scientific areas for data exploration. This course is an introduction to the Python programming language for students without prior programming experience. We cover data types, control flow, module-based programming, and graphical user interface-driven (PyCharm based) applications. The examples and problems used in this course are drawn from diverse areas such as text processing, coding game and image manipulation, and web programming.
Course Evaluation	Class participation 20% (full 20% or grade F: see class policy) Homework 20% · 2 Programming assignments Mid. exam 25% Final exam 30%
Course Materials	Handouts
Class Policy	Up to 3 times of missing class is allowed with no penalty, but for more than 3 times of missing class, grade F will be given.
Requirement	**Personal Notebook**

❏ Course Schedule

Session 1 (Jun. 27) – Introduction, Environment (IDLE) Setup
Session 2 (Jun. 28) – Basic Syntax
Session 3 (Jul. 2) – Variable Types
Session 4 (Jul. 4) – Basic Operators
Session 5 (Jul. 5) – Conditionals
Session 6 (Jul. 9) – Loops
Session 7 (Jul. 11) – *Mid. Exam*
   ·   **Programming assignment 1 (due 1-week)**
Session 8 (Jul. 12) – Numbers, Strings
Session 9 (Jul. 16) – Lists, Tuples
Session 10 (Jul. 18) – Dictionary
   ·   **Programming assignment 2 (due 7/26)**
Session 11 (Jul. 19) - Functions
Session 12 (Jul. 23) – File I/O
Session 13 (Jul. 25) – Practice/Application
Session 14 (Jul. 26) - *Final Exam*