



Arab Academy for Science, Technology, and Maritime Transport
College of Computing and Information Technology
CS111 Introduction to Computers

Syllabus

Lecturer:
TA:

Room:
Room:

Description

This course introduces students to the fascinating world of computer science. Students learn to think algorithmically to solve simple problems. Topics include introduction to computer science and its fields, computer structure and internal operation, numbering systems and internal data representation, systematic thinking and problem solving skills, and modular programming. Students apply concepts learned using Scratch and a high level language.

Assessment

7th Week Grade	Exam (20%)	Section Quiz1 (5%) + Section Quiz2 (5%)
12th Week Grade	Exam (15%)	Section Quiz (5%)
Year Work	Year Work (10%)	
Final	Exam (40%)	

Text Book

- **Behrouz A. Forouzan and De Anza College, "Foundations of Computer Science", 3rd Edition, Cengage Learning.**

References

- **C Workbook: Thomas Scheffler, "Think as a Computer Scientist - C Version", Version 1.08, Nov 25th, 2012**
 - http://prof.beuth-hochschule.de/fileadmin/user/scheffler/Lehre/Think-C_v1.08.pdf
- **Scratch : <http://scratch.mit.edu>**
- **Paul Deitel and Harvey Deitel, "C: How to Program", 7th Edition.**

Advice

- Students should use the slides as a guideline to study but also use the book for in depth knowledge.
- Any inquiries can be answered at the end of the lesson and also at the office hours.
- It is very important to attend lectures and sections and deliver homework and assignments on time.

Content

Week	Lecture	Section
Week 1	Introduction to Computer Science and its Fields	Introduction, Basic Computer and Internet Skills
Week 2	Data Storage and Numbering Systems	Scratch
Week 3	Computer Organization and Operating Systems	Numbering Systems
Week 4	Algorithms and Flowcharts	Numbering Systems (cont.)
Week 5	Algorithms and Flowcharts (cont.)	Algorithms and Flowcharts
Week 6	Programming Languages The C Language	Algorithms and Flowcharts (cont.)
Week 7	7th Week Exam	Algorithms and Flowcharts (cont.)
Week 8	I/O, Data types	Introduction to the C IDE Simple Programs
Week 9	Operations, expressions, and assignment	Programming in C (I/O, Data types, Operations, expressions, and assignment)
Week 10	Decisions in C	Programming in C (I/O, Data types, Operations, expressions, and assignment)
Week 11	Loops in C	Programming in C (If, switch)
Week 12	12th Week Exam	Programming in C (for, while)
Week 13	Arrays	Programming in C (Arrays)
Week 14	Putting it all together	Putting it all together
Week 15	Revision	Revision
Week 16	Final Exam	

