



UNIVERSITÀ DI PARMA

# Syllabus

*Where's my syllabus to guide me through  
life?*

Megan McCafferty

- What is a syllabus?
- Course syllabus
- Detailed course syllabus

SUMMARY

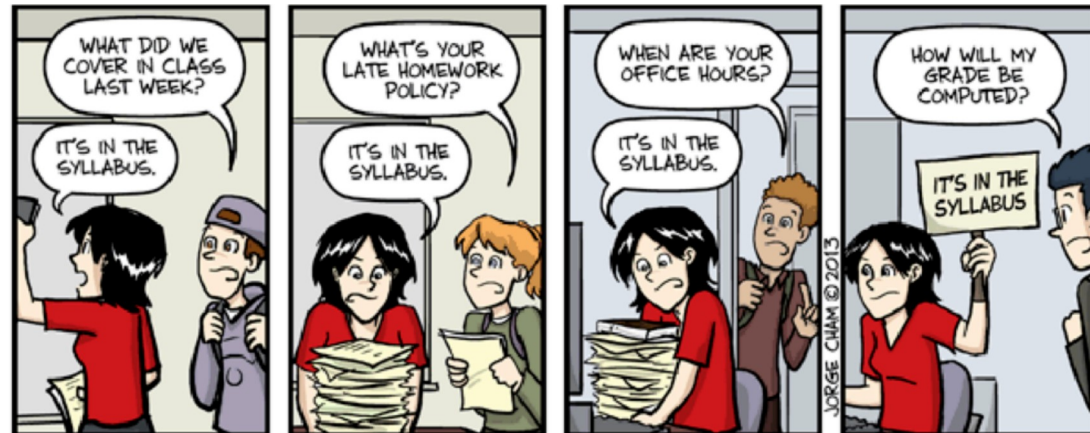


- The following slides simply contain the syllabus of the course “as is”
- Some topics are better detailed in other slides



# What is a syllabus?

- A syllabus is a document that outlines all the essential information about a college course.
  - It lists the topics you will study
  - Lessons, tests, and exam modalities
  - Suggested books



1. Introduction to programming
2. algorithms
3. basic computer architectures
4. programming languages
5. representation of numbers in computer science
6. C programming language
7. expressions in C
8. flow control
9. Data types in C
10. Arrays
11. Dynamic mem. alloc. and pointers
12. C strings
13. functions
14. I/O in C
15. composite data
16. function pointers

- K.N. King, C Programming: A Modern Approach (2nd Edition), W W Norton & Co
- Bellini Guidi, Linguaggio C, Mc Graw Hill
- B.W. Kernighan e D. Ritchie, The C Programming Language: ANSI C Version, Pearson College
- Darnell Margolis, C manuale di programmazione, Mc Graw Hill

- The objective of the course is to provide the student with the ability to understand the principles of computer science and programming using C as the reference language and in particular:
  - Data representation
  - Algorithm concept
  - Basic architecture of processing systems
  - Procedural programming paradigm
  - Introduction to software engineering
- The skills to apply the knowledge listed concern the development of the so-called "computational thinking":
  - Decomposition of complex problems
  - Top-Down problem solving
  - Syntax and semantics of the C language

- No propaedeutics courses
- It is assumed that the student knows the basics of using computers and the Internet
  - the equivalent of modules 1, 2, 3 and 7 of the ECDL (European Computer Driving Licence) syllabus.



- Classroom lessons, with the help of slides made available to students in advance.
- Guided solution of classroom exercises.
- Programming exercises in the laboratory.
- Laboratory exercises are the most critical part of the course.
  - The proposed exercises are relayed to the same general topics as the classroom lessons.
  - The idea is to introduce the principles of programming, guiding the student to the solution of problems with an increasing level of complexity.



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KEEP  
CALM  
IT'S  
QUESTION  
TIME

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