



JOHN CABOT UNIVERSITY

COURSE CODE: "CS 101"
 COURSE NAME: "Introduction to Computer Science"
 SEMESTER & YEAR: Spring 2014

SYLLABUS

INSTRUCTOR: Stefano Gazziano
EMAIL: sgazziano@johncabot.edu
HOURS: MW 4:30 PM 5:45 PM
TOTAL NO. OF CONTACT HOURS: 45
CREDITS: 3
PREREQUISITES:
OFFICE HOURS:

COURSE AIMS:

The course offers an overview of Computer Science and how it changed the world.

Computers are taken for granted in today's society - in industry, academia, and the home - and today's user typically has no knowledge of how computers work. But it is precisely this knowledge of how computers work which leads to an appreciation of the capabilities, compromises and limitations of computing, internetting, e-commerce, and many e...ings.

Computer Science and its industrial application, called Information and Communication Technologies, or ICT, have driven in less than 30 years a major transformation of manufacturing and service industries such that no activity in these sectors can now be imagined without computers and networks. ICT also had a deep impact on individual and societal culture, allowing an ability to produce and disseminate knowledge, data and information simply unprecedented in human history.

Prospective students may question or comment on our FB page:

<https://www.facebook.com/pages/CS101-Introduction-to-Computer-Science-at-JCU/484088545020165>

SUMMARY OF COURSE CONTENT:

The history of the subject and the main areas of both academic and industrial research as well as societal and geopolitical impacts are discussed.

- History of computing
- Computers architecture and technology
- Software layers: operating systems and application software
- File systems and file/folder management.
- Networks architecture and protocols
- How the Web works: servers and browsers.
- Storage: local, Local Area Network, Intranet, Internet and the cloud Where is my stuff ?
- Cloud computing: the new paradigm.
- Local application v/s cloud suites
- Databases and Multimedia
- The impact of computing technologies in a societal context. Blogs, social networks, web reputation management.
- Industrial impact of ICT: business intelligence, data analysis, e-marketing, targeted ads, analytics, search engine optimization, digital contact with customers.

- Additive manufacturing and 3D printers for business.
- Next generation developments: the "future Internet" or "Internet of the things".
- Privacy and personal data protection on the Internet. Mobile computing, location based services.
- Computer and network security : viruses, frauds, phishing, spoofing, scam and other assorted malware.
- Firewalls, secure protocols, safe user behaviour.
- Net neutrality, free access to the Internet, state censorship technologies and practices.
- "Cyber war", military use of the net, industrial espionage, global security concerns.

LEARNING OUTCOMES:

Students will understand the theoretical and practical foundations that drive actual and future computing. The trends in technological advancements, the impact of computing technologies in a societal context and in modern industry.

TEXTBOOK:

NONE

REQUIRED RESERVED READING:

NONE

RECOMMENDED RESERVED READING:

NONE

GRADING POLICY

-ASSESSMENT METHODS:

Assignment	Guidelines	Weight
Midterm		25
Final exam		25
Class tests	Multiple choices tests or practical exercises will be scheduled and are an integral part of student assessment.	25
Class participation	Active participation in class, contribution to teaching by sharing experiences, workgroup	25

-ASSESSMENT CRITERIA:

A Work of this quality directly addresses the question or problem raised and provides a coherent argument displaying an extensive knowledge of relevant information or content. This type of work demonstrates the ability to critically evaluate concepts and theory and has an element of novelty and originality. There is clear evidence of a significant amount of reading beyond that required for the course.

B This is a highly competent level of performance and directly addresses the question or problem raised. There is a demonstration of some ability to critically evaluate theory and concepts and relate them to practice. Discussions reflect the student's own arguments and are not simply a repetition of standard lecture and reference material. The work does not suffer from any major errors or omissions and provides evidence of reading beyond the required assignments.

C This is an acceptable level of performance and provides answers that are clear but limited, reflecting the information offered in the lectures and reference readings.

D This level of performance demonstrates that the student lacks a coherent grasp of the material. Important information is omitted and irrelevant points included. In effect, the student has barely done enough to persuade the instructor that s/he should not fail.

F This work fails to show any knowledge or understanding of the issues raised in the question. Most of the material in the answer is irrelevant.

-ATTENDANCE REQUIREMENTS:

Attendance is mandatory. There is no textbook, and assigned readings must be read before classes.

Please refer to the university catalog for the attendance and absence policy.

ACADEMIC HONESTY

As stated in the university catalog, any student who commits an act of academic dishonesty will receive a failing grade on the work in which the dishonesty occurred. In addition, acts of academic dishonesty, irrespective of the weight of the assignment, may result in the student receiving a failing grade in the course. Instances of academic dishonesty will be reported to the Dean of Academic Affairs. A student who is reported twice for academic dishonesty is subject to summary dismissal from the University. In such a case, the Academic Council will then make a recommendation to the President, who will make the final decision.

STUDENTS WITH LEARNING OR OTHER DISABILITIES

John Cabot University does not discriminate on the basis of disability or handicap. Students with approved accommodations must inform their professors at the beginning of the term. Please see the website for the complete policy.

SCHEDULE

History of computing

Computers architecture and technology

Software layers: operating systems and application software

File systems and file/folder management.

Networks architecture and protocols

How the Web works: servers and browsers.

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Cloud computing: the new paradigm.

Local application v/s cloud suites

Databases and Multimedia

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