COURSE SPECIFICATION DOCUMENT

Academic School / Department: School of Liberal Arts

Programme: Computer Science

FHEQ Level: 5

Course Title: Computer Networks

Course Code: DGT 5103

Student Engagement Hours: 120

Lectures: 30 Lab: 15 Independent / Guided Learning: 75

Credits: 12 UK CATS credits

6 ECTS credits
3 US credits

Course Description:

This course is about how networks work both as hardware and programming across the internet, wired networks and wireless networks such as LANs, broadband and Bluetooth. The course will also explore in detail the various layers of computer network interfaces to provide efficient and safe systems.

Prerequisites:

None

Aims and Objectives:

By the end of this course, students will have the necessary knowledge to understand how the hardware and software relating to computer networks function. They will understand the roles various layers of a computer networks play in providing an efficient network. Students will also be aware of industry standard policy, legal and ethical issues relevant to computer networks.

Programme Outcomes:

COMPSC: A3, A5, A8, B2, B4, B5, C7

A detailed list of the programme outcomes are found in the Programme Specification.

This is located at the archive maintained by Registry and found at: https://www.richmond.ac.uk/programme-and-course-specifications/

Learning Outcomes:

By the end of this course, successful students should be able to:

- Understand the use, types and technology of networks and its' protocols
- Demonstrate understanding of the various layers and access controls of a network system
- Evidence how hardware and software interface to provide an efficient and safe network
- Show understanding of policy, legal and ethical issues relevant to computer networks

Indicative Content:

- Types of networks
- Physical layer
- Data link layer
- Access control
- Network layer
- Transport layer
- Application layer
- Policy, legal and social issues

Assessment:

This course conforms to the University Assessment Norms approved at Academic Board and located at: https://www.richmond.ac.uk/university-policies/

Teaching Methodology:

• Lectures, practical demonstrations and step-by-step software tutorials, class workshops, one-to-one tutorials.

Indicative Text(s):

"Computer Networks" by Andrew Tanenbaum, Nick Feamster and David Wetherall, Global (6th) Edition, Pearson, 2021.

Journals/Additional Texts

Baase, S. and Henry, T., 2017. A Gift of Fire. 5th ed. NY, NY: Pearson.

Web Sites

Click here to enter text.

See syllabus for complete reading list

Change Log for this CSD:

| Nature of Change | Date Approved & Approval Body | Change Actioned by Registry Services |
|--------------------------|-------------------------------|---|
| | (School or AB) | |
| Revision – annual update | May 2023 | |
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