COS5021-B :Data Structure & Algorithms

Introducing Your Teaching Staff!

Lead Lecturer

▶ Suleman Khan

▶ Email: s.khan387@Bradford.ac.uk

▶ Office D3.03 Horton

▶ Research/Teaching Interests: Cybersecurity, Network Security, Iot

▶ Web link: Suleman Khan - Google Scholar

▶ Availability: Monday and Thursday

Who else is involved?

Demonstrators

Moemedi Lefoane (m.lefoane@bradford.ac.uk)

Hassan Farooq (h.farooq14@bradford.ac.uk)

Jacob Farrow (j.farrow@bradford.ac.uk)

Abdul Hamid (a.abdulhamid2@bradford.ac.uk)

What is this module about?

▶ We write the codes to solve the same problem, your code runs 0.1s and my code runs 1 hour ?...After this module study, you will know the reason and you can also know how. General speaking, this module is designed to optimise your code and enhance the performance

Module Details

▶ 20 Credit Module!

▶ How will it be delivered?

Lecture = 02 hr, Lab = 02 hr

Overall Module Focus:

▶ LO1:Recognise common data structures and fundamental algorithms and be familiar with the associated terminology.

▶ LO2: Define Abstract Data Types in terms of their data structures

▶ LO3: Identify algorithms and demonstrate their operation and effect in solving problems.

▶ LO4: Assess efficiency of various implementations and justify choice of implementation for any application

▶ LO5: Construct and test simple algorithms using suitable data structures, analyse the complexity and running times for algorithms.

Module/Lecture Materials

- Available in CANVAS

  - Learning Materials

Module Assessments

- **Assessment 1:** Course work (6 Computing exercises), (Weighting: 50%)

- **Assessment 2:** Report (4 Computing exercises), (Weighting: 50%)

Assessments Feedback

- **Assessment 1:** All feedback will be provided to the students within 14 working days after the due date of the assessment submission.

- **Assessment 2:** All feedback will be provided to the students within 14 working days after the due date of the assessment submission

CW Extension and Extenuating Circumstances

▶ Refer to Faculty Policy student can apply for CW extension. The process is explained in the document provide in the link

▶ · **Microsoft Word Document**

▶ Reminded that the Personal Tutors can also contribute to their CW extension and EC applications (if it is genuine).

Attendance and Classroom Behaviour

▶ Please keep quiet and 'take off' your earphones...

▶ Attendance is compulsory for all the lectures, tutorials and labs; absence would lead to a mark reduction even VISA withdraw

▶ Lecture/Tutorial/lab- Do not be late, it will be considered as an absence if you are late over 20 mins; Do not play with your mobile, tablet, iPad, laptop, desktop, apple watch, music player, Switch, PS4, Xbox...etc. unless you use it for learning purpose

▶ Disruptions in lectures will not be tolerated at all.

What I Expect From You

- Good attendance… please!

- Positive questions, anecdotes and insight I may miss

- Muted phones, exceptions will be given for emergencies etc.

- Be on time – if you are going to be late, please contact me and state how long

- A decent quality of academic writing

- Standard etiquette for speech/ presenting

- No music on phones or via YouTube

Any Questions