

Operating Systems and Systems Programming

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Outline of the module

- Computer architecture: programmer's perspective
- C programming
 - Structure of a C program
 - Pointers and memory management
 - Applications of memory management
- Programming with threads
- OS topics:
 - Structure of an Operating System
 - Process management
 - Memory management
 - File systems
 - Input/Output
 - Kernel programming

Study materials

- Lecture notes and resources

<https://canvas.bham.ac.uk/courses/70440>

- There is a dedicated Teams channel for discussions; for joining instructions see canvas
- Recommended Course Books
 - The C Programming Language (2nd Edition) Kernighan and Ritchie
 - OS Concepts (10th Edition) Silberschatz et al.

Assessment

- 80% exam, 20% coursework
- Description of coursework and assessment criteria will be made available on Canvas.
- There will be 2 formative and 1 summative assignments.
- Make use of the labs (initially two hours per week) to work on the coursework problems.
- Will use virtual machine for exercises; see Canvas for details.