

# **ICS 2103: INTRODUCTION TO SYSTEM PROGRAMMING**

## **Course Description**

This course provides an introduction to systems level programming including Introduction to programming with procedures and primitive data types. Topics include: an introduction to the Unix operating system and the C programming language.

## **Course Contents**

1. Introduction to system programming
2. Introduction to unix:
  - Unix vs. Windows; logging on; files and directories; pathnames, and directory and file structure; editors; shells command language; shell programming.
3. Review of C
4. Bit Manipulation
5. Arrays and Pointers
6. Strings and Text Files
7. Deriving Types
8. Linked Lists

## **Course evaluation**

2-3 assignments	5%,	
2 Continuous Assessment Tests		10%,
Practical lab sessions	15%	
Final Exam	70%	

## **Reference books:**

- Adam Hoover, Systems programming with C and unix, ADDISON-WESLEY, 2009.
- Hahn, *Guide to Unix and Linux*. McGraw Hill, 2009
- King, *C Programming: A Modern Approach*. Norton, 2nd edition. 2008
- Any other relevant book

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