

Winter 2021 Term New Course Offering: ACS-3931 "Principles of Operating Systems"

ACS-3931-001 Principles of Operating Systems

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W: https://www.acs.uwinnipeg.ca/scamorlinga Time: Tuesday / Thursday 10:00 am – 11:15 am

Duration: January 6th – April 23rd, 2021

ACS-3931-001 (3) Principles of Operating Systems

Prerequisites: ACS-2906 and ACS-2947 with a minimum grade of C

This course covers the principles and design of operating systems with a hands-on component focused in the Linux Operating System. An Operating System is system software that manages resources (hardware & software) and provide common services to computer programs (See figure above). Students are introduced to principles in process management, memory management, I/O device management, file systems, and operating system security. After each principle topic, we discuss how the respective principle is applied into the Linux Operating System. Linux is a family of open-source Unix-like OS based on the Linux kernel. Linux is used on a great proportion of web servers worldwide and the Android OS (popular in smartphones) is based on the Linux kernel. If you are an ACS major or interested in how computers beat, this is a course for you. We will review code in 'C' language and some assembly language to get a good understanding of principles and design aspects.

ATTENTION APPLIED COMPUTER SCIENCE STUDENTS