جامعة الملك سعود

كلية الدراسات التطبيقية وخدمة المجتمع

الفصل الدراسي الأول 1437 / 1438هـ خطة مقرر 310 عسب

**GC310 Applied Operating Systems**

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| --- | --- | --- | --- | --- | --- |
| **أستاذة المقرر** | **أوقات المحاضرات** | **الساعات المكتبية** | **المكتب** | **البريد الإلكتروني** | **الموقع الإلكتروني** |
| ساره الشعلان | الأحد 8-10 محاضرة  الثلاثاء 8-9 محاضرة  الثلاثاء 9-10 تمارين | الأربعاء  9-10  الخميس 10-11 | مبنى 26  ق2 | saalshalan@ksu.edu.sa | http://fac.ksu.edu.sa/saalshalan |

**Reference**:

* Handouts & lecture notes
* Text Book : Operating System Concepts Essentials, Abraham Silberschatz, Peter B. Galvin, Greg Gagne, Wiley, 1st Edition, 2010.

**Course Description:**

Applied Operating Systems course will cover the following topics:

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| **Week No.** | **Topic** |
| 1,2 | Introduction: Operating Systems Case Studies |
| 3,4 | The Linux System: Linux History; Design Principles; Kernel Modules; Process Management; Scheduling |
| 5,6,7 | The Linux System: Memory Management; File System; Input and Output; Interprocess Communication; |
| 8 | The Linux System: Network Structure; Security; |
| 10,11 | Windows 7: History; Design Principles; |
| 12,13 | Windows 7: System Components; Terminal Services; |
| 14,15 | Windows7: File System; Networking; Programmer Interface |

**Course Objectives:**

* Learn basic concepts of operating systems.
* Identify the main functions of operating systems.
* Describe the implementation of file systems and I/O device management.
* Recognize the application programming interface.
* Understand the main operating system functions.
* Compare between the current major operating systems.
* Evaluate different file system types and their features.
* Analyze process scheduling and inter-process communication techniques.
* Illustrate network protocols support in major operating systems.

**Grading Policy:**

* First Mid 15%
* Second Mid 15%
* Quizzes 10%
* Assignments 10%
* Project 10%
* Final Exam 40%

**Class Rules:**

* Please check the instructor’s website for course material and announcements.
* Attendance is very important if you miss class more than 25% you will be forbidden to enter the final exam
* If you’re late you may attend but you will be considered absent.
* If you miss one of the major exams you will be not excused unless the instructor accepts your formal medical report.
* Copied assignment will be marked by zero.
* Late assignment will not be accepted.