**United** International **University** (UIU) **Dept. of Computer Science & Engineering (CSE)** COURSE OUTLINE

# **Course Code:** CSI-310, Course **Title:** Operating System Concepts Laboratory

**Section:** B and C, Tr**imester**: Fall 2018

**Instructor :** Quazi Farah Nawar(QFN)

**Counseling hr :**

|  |  |
| --- | --- |
| **Day** | **Time** |
| Saturday | 8.30 – 11.35 am,1.10 – 2.00 pm, Room : 326 |
| Sunday | 8.30 – 10.05 am , Room : 326 |
| Tuesday | 10.05-11.35am , Room : 326 |
| Wednesday | 8.30 – 10.05 am , Room : 326 |

**Email:** farah@cse.uiu.ac.bd

**Web:** <https://sites.google.com/a/cse.uiu.ac.bd/quazi_farah_nawar/os-lab>

<https://elms.uiu.ac.bd/>

Percentage of weight of the tests/exams is as follows:

|  |  |
| --- | --- |
| Attendance | 10% |
| Lab Performance (Online) | 25% |
| Presentation | 10% |
| Mid | 15% |
| Final | 20% |
| Project (Offline) | 20% |

**Course Grade** The following scale will be used to convert numerical grades to letter grade:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Letter**  **Grade** | **Marks** | **Grade Point** | **Letter Grade** | **Marks** | **Grade Point** |
| A (Plain) | 90-100 | 4.0 | C+ (Plus) | 70-73 | 2.33 |
| A- (Minus) | 86-89 | 3.67 | C (Plain) | 66-69 | 2.00 |
| B+ (Plus) | 82-85 | 3.33 | C- (Minus) | 62-65 | 1.67 |
| B (Plain) | 78-81 | 3.00 | D+ (Plus) | 58-61 | 1.33 |
| B- (Minus) | 74-77 | 2.67 | D (Plain) | 55-57 | 1.00 |

**Outcome:**

After this course student will be able to

* Write any shell scripts with various shell commands.
* Understand and implement concept of thread synchronization and inter process communication with mutual exclusion.

**Lab Class Plan**

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| --- | --- |
| **Week No** | **Topics** |
| 1 | Introduction, Course Overview, Lecture on Shell Commands |
| 2 | Lecture on Shell Commands |
| 3 | Online(1) on Shell Command + Basic Idea of Shell Scripts |
| 4 | Lecture on Arithmetic Operations and Implementing logic with If Else, Case in Shell Scripts. |
| 5 | Shell Scripts Extended |
| 6 | **Midterm Exam** |
| **7** | Lecture on Command Line Arguments, Loops , Function in Shell Scripts and Basic String Manipulation |
| 8 | Online (2) on Shell script + Lecture on Process Scheduling Algorithm |
| 9 | Offline(1) on Process Scheduling Algorithm |
| 10 | Lecture on IPC (Inter Process Communication) |
| 11 | Offline(2) on IPC |
| 12 | **Final Exam** |