

CSE4510 Operating Systems Lab

Introduction & Shell Programming

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United International University (UIU)
Summer 2025

- **Course Overview**
 - Course contents
 - Assessments methods
- **Introduction to Shell**
 - Basic shell commands
 - Practice problems

- **Assessment Methods**

Assessment Item	Weight (%)
Attendance	5
Assignment	15
Class Performance	30
Viva	10
Mid	20
Final	20

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- **Counseling Hours**

Day	Time
Saturday & Tuesday	10:00 AM – 11:00 AM
Sunday & Wednesday	11:00 AM – 01:30 PM

- **Contact:**  Office: **719(A)**  Email: salman@cse.uiu.ac.bd

Course Topics

- Shell basic commands
- Shell scripting
- Inter-process communication & synchronization
- Scheduling algorithms

Assessment Items

Type	Count	Marks	Note
Assignment (<i>Offline</i>)	3	15	Must submit all
In-class Assignment (<i>Online</i>)	3	20 [Class Performance]	Best 2 out of 3
Class Participation	-	10 [Class Performance]	Practice problems in class
Viva	4	10	Evaluation of assignments
Mid	1	20	Coding test
Final	1	20	Written quiz

- Online-1: Bash Scripting; Online-2 and Online-3 will be on extending Offline-2 and Offline-3, respectively.

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- Fancy Graphical User Interface (GUI)
- Voice command
- AR/VR Gesture and Gaze etc.

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- **Text-based interface (Shell)** ← *powerful and flexible*
 - Invoke and combine tools via the Command Line Interface
 - Multiple shell variants; same core concepts
 - We use the Bourne-Again Shell (bash); the default in Ubuntu

Some Basic Commands & Flags

# date	# touch
# echo	# mv
# \$PATH	# cp
# which	# rm, rmdir
# pwd	# I/O redirection: <, >, >>
# cd	# piping with
# ls (with flags)	# sudo
# file permissions (rwx)	# chmod
# --help (& man)	# tee
# mkdir	# curl