



**NANYANG  
TECHNOLOGICAL  
UNIVERSITY**  
SINGAPORE

School of Computer Science and Engineering

# **LABORATORY MANUAL**

## **SC2005 Operating Systems**

*Understanding of Nachos Kernel*

**SESSION 2022/2023  
SEMESTER 1**

**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING  
NANYANG TECHNOLOGICAL UNIVERSITY**

**IMPORTANT INFORMATION****1. CONTENT**

This laboratory manual consists of 4 Experiments (Experiments 1, 2, 3 and 4) spread over 4 lab sessions.

**2. LABORATORY SCHEDULE**

The laboratory schedule is as follows:

Laboratory session 1	Experiment 1 on Nachos Threads
Laboratory session 2	Experiment 2 on CPU Scheduling
Laboratory session 3	Experiment 3 on Process Synchronization
Laboratory session 4	Experiment 4 on Virtual Memory

**Lab attendance is compulsory. Makeup is only available for valid reasons (with official supporting document).**

**3. ASSESSMENT**

The assessment of the lab component for this course consists of implementation review and two quizzes.

- **Lab Implementation (18%)**
  - Correct implementation and output generation for each lab experiment – **3% for lab 1, 5% each for labs 2 - 4**
  - TA or Lab Supervisor will compile/execute your code and evaluate your implementation
  - **Deadline is 1 week after your corresponding lab session (e.g., if lab session is from 10AM-12PM on a Monday, then deadline is 9:59AM on the next Monday).**
  - **Remember to leave your implementation and all generated outputs in your folder, and DO NOT modify the folder structure, folder names or file names in anyway**
- **Lab Multiple-Choice Quizzes (25%)**
  - Quiz 1: On Lab 1 and Lab 2 topics – **5<sup>th</sup> Oct.**
  - Quiz 2: On Lab 3 and Lab 4 topics – **10<sup>th</sup> Nov.**
  - **Both the quizzes will be released through NTULearn**

**4. REMOTE ACCESS**

For remote access, please refer to the instructions in SC2005 Lab Guidelines document.