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Document Title: <b>WORK INSTRUCTION FOR COMPUTER SCIENCE PRACTICAL SESSIONS</b>		

# CHUKA UNIVERSITY

## WORK INSTRUCTION

### FOR

### COMPUTER SCIENCE PRACTICAL SESSIONS (CU/WI/COMP/03)

#### DOCUMENT REVIEW SHEET

The signatures below certify that this Work Instruction (WI) has been reviewed and accepted, and demonstrate that the signatories are aware of all the requirements contained herein and are committed to ensuring their provision.

Name	Signature	Date
<b>Revised By:</b> COD/COORDINATOR		15.1.2018
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## 2.0 GENERAL

### 2.1 Purpose

The purpose of this Work Instruction (WI) is to guide conducting of computer science practical lessons in the computer laboratory

### 2.2 Scope

This WI applies to practical lessons conducted in the Computer Science laboratories

### 2.3 References

- (i) ISO 9001:2015 Clause 4.4.2
- (ii) Quality Manual
- (iii) Computers and software technical operation manuals

### 2.4 Definitions and Abbreviations

#### Definitions

In addition to the relevant definitions of terms given in ISO 9000:2005, the following specific definitions shall apply:

- Laboratory Session: Time duration allocated for student to do laboratory lessons.
- Laboratory Sheet/manual: A printed material usually contains a series of instructions and information given to the student on how to conduct the laboratory lesson.
- Laboratory Report: A written report prepared by student based on individual practical lesson requirement. The format and requirements are usually stated in the laboratory instructions sheet.
- Computer Laboratory Coordinator: A person in charge of coordinating all the laboratory sessions of the semester.
- Computer Laboratory Instructor: An academic staff (lecturer or tutor) in charge of the laboratory session. The laboratory instructor will give briefing and instructions to students during the laboratory session.
- Computer Technologist: A person helping students perform practicals in the Computer Laboratory.
- Computer Laboratory Administrator: A person in-charge of the Computer Laboratory administrative matters.

#### Abbreviations

<b>AMR</b>	=	Assistant Management Representative
<b>MR</b>	=	Management Representative
<b>QMS</b>	=	Quality Management System
<b>WI</b>	=	Work Instruction
<b>PC</b>	=	Personal Computer

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## 2.5 Responsibility

The COD has the principal responsibility for ensuring that this work instruction remains adequate for its intended purposes.

- (i) All Computer Laboratory Administrators have to ensure that all computers are in good condition for use at all times.
- (ii) Computer Technologists shall conduct practical lessons assigned to them.
- (iii) Computer Laboratory Instructors tasked with setting practical lessons should coordinate how those practical lessons are conducted and ensure adequate learning for the intended students.

## 3.0 COMPUTER SCIENCE LABORATORY SESSIONS REGULATIONS

### 3.1 The Computer Science Laboratory Schedule

- (i) Computer Laboratory coordinator is the one who is in-charge of organizing the laboratory schedule.
- (ii) Laboratory schedule and laboratory group will be put up on the departmental notice boards or faculty webpage before the commencement of laboratory session in each semester.
- (iii) Students are not allowed to change laboratory schedule without getting approval from the computer laboratory instructors.
- (iv) The laboratory operating hours of normal working day are: Monday to Friday, 8.00 am to 5.00 pm (Excluding public holidays)

### 3.2 Tools and Equipment

- (i) A working computer
- (ii) Relevant input/output devices (Mouse, Keyboard, Scanner, or Printer)
- (iii) Appropriate operating system and application software
- (iv) Other laboratory instrument and equipment necessary to carry out a certain experiment

### 3.3 Computer Science Laboratory Safety Rules

- (i) In the event of an emergency, everyone in the laboratory should escape through the emergency exit. If in a story building, avoid using lifts, use the stairs.
- (ii) If a fire breaks out in the laboratory, the person nearest to the central power circuit breaker should switch off the switch.
- (iii) It is always a good practice and a responsibility of an individual to keep a tidy working condition in laboratory.

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- (iv) For overall safety when working with other people, it is essential for each student to follow the procedures given by the laboratory instructor when conducting laboratory experiment.
- (v) Before the experiment start, students must study the information and understand the procedures mentioned in the given laboratory sheet.
- (vi) Electric shock is a serious fatal error due to human negligence. Electric current of higher than 100mA may cause death to human. Thus, do not work with electricity under wet condition in laboratory.
- (vii) If there is a tingling feel when working with electrical devices, stop and switch off the devices immediately. Place a warning note before reporting to the laboratory staff/instructor and wait until further instruction.
- (viii) Inform laboratory computer instructor if you doubt the condition is not safe during the experiment.
- (ix) Do not wear sandals, slippers and high heel shoes inside the laboratory.
- (x) Students with long hair must get it tied up tidily when doing computer laboratory work or risk getting electrocuted.
- (xi) Before operating a high voltage equipment, always ask the laboratory instructor to be accompanied to check proper condition of electric circuit.
- (xii) When operating laser equipment, please avoid looking directly to the laser source.

### 3.4 General Rules in the Computer Science Laboratory

- (i) For any safety critical practical session, students are not allowed to work alone without the supervision of laboratory instructor.
- (ii) Any unauthorized experiment without the knowledge of laboratory instructor is prohibited.
- (iii) Students must abide the dress code while working in the laboratory.
- (iv) Foods, drinks and smoking are strictly prohibited inside the laboratory.
- (v) Student bags and other belongings must be kept at the designated places.
- (vi) Noise must be kept to the minimum as a courtesy to respect others.
- (vii) Computer accessories must be handled with care
- (viii) Students shall be liable for damages of devices caused by individual negligence. If damages occurred, an investigation will take place to identify the causes and the names of the involved students will be recorded for faculty attention.
- (ix) Students shall report immediately to the computer laboratory administrator, if the laboratory equipment is suspected to be malfunctioning or faulty.
- (x) Students are required to instill an instinctive awareness towards property value of laboratory equipment and to be responsible when using it. Any damages can cause to jeopardize the success of not only the individual work but also to the university.
- (xi) Do not attempt to remove and dismantle any parts of the equipment/computer peripheral from its original design without permission. Instrument and equipment must be returned orderly after using them.

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- (xii) Students are strictly prohibited to take any equipment out of the laboratory without the permission of computer laboratory administrator.
- (xiii) Students should ask permission from laboratory instructor before operating the laboratory equipment.
- (xiv) Students should not attempt to use any unfamiliar equipment without first consulting the laboratory instructor. Do not bring away any technical manuals from the laboratory.
- (xv) Students should report immediately to the computer laboratory administrator if any injury occurred.
- (xvi) Student should report immediately to the computer laboratory administrator if discovered any damages of equipment and hazardous situation.
- (xvii) Please check the notice board regularly and pay attention to the laboratory announcements.
- (xviii) Please check with the laboratory instructor about the deadline of laboratory report submission.
- (xix) Disciplinary action shall be taken against those students who fail to abide the rules and regulations.
- (xx) It is disallowed to bring any outsiders (non-registered parties) into the Computer Laboratory.
- (xxi) Students are strictly prohibited from taking out any items from the Computer Laboratory.

### **3.5 Rules and Regulations on Computer Usage in the Laboratory**

- (i) The facilities at the Computer Laboratory are to be used for learning purposes only.
- (ii) Carry your STUDENT I.D. cards at all times whenever you come into the Computer Laboratory.
- (iii) Do not tamper with any computer, printer, or any other associated equipment. If there are problems or faults, report immediately to the staff at the Computer Laboratory.
- (iv) Do not remove any equipment or document from the Computer Laboratory.
- (v) Do not alter the default hardware and software setup of the computers and printers in the computer laboratories.
- (vi) Do not copy, rename, change, examine or delete files or information belonging to any other user of the University.
- (vii) Do not install any unauthorized or unlicensed software into the PC of Computer Laboratory.
- (viii) If you have any doubts about what you are doing, do not do it. Contact the support staff at the Computer Laboratory for clarification.
- (ix) Do not eat or drink inside the Computer Laboratory.
- (x) Do not disclose your password or attempt to discover any other user's password.
- (xi) Do not transmit abusive, obscene, fraudulent, threatening or repetitive messages to other users.

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- (xii) Do not make any noise, chit-chat, hold group discussions or disturb other users at the Computer Laboratory in any way.
- (xiii) Switch off your hand phone when you are in the Computer Laboratory.
- (xiv) Do not bring your bags into the Computer Laboratories.
- (xv) Computer Laboratory staff reserves the right to suspend the student from using the laboratory facilities if found in breach of any rules and regulations stated above.

### **3.6 Computer Science Practical Lessons Attendance**

- (i) Attendance is compulsory to all students
- (ii) Student must be punctual to attend laboratory session.
- (iii) Students are generally given 1-2 weeks time to prepare the laboratory report.
- (iv) Laboratory report has to be submitted to the computer laboratory instructor at the designated time and place.
- (v) Laboratory report is an individual work. Thus, fabricating results and copying manners are strictly prohibited.
- (vi) The student shall be briefed to follow instructions.
- (vii) Student must complete the experiment within the allocated time.
- (viii) Students who are late for more than 30 minutes will be barred to attend the laboratory session. Only students with valid reason of medical basis or unforeseen circumstances can be considered to apply for laboratory replacement.
- (ix) Attendance shall be taken during the laboratory session.
- (x) Student will be asked to show his/her results to the computer laboratory instructor before leaving at the end of laboratory session.

## **4.0 COMPUTER SCIENCE LABORATORY INSTRUCTIONS**

- (i) The computer laboratory instructor prepares the practical lessons/tasks in consultation with the computer laboratory administrators.
- (ii) The computer laboratory administrators ensure that all the relevant computer input/output devices (such as monitor, mouse and keyboard) are attached on the computer's system unit.
- (iii) The computer laboratory administrators also ensure that the computers are installed with the appropriate software to be used in the practical lessons/assignments/tasks.
- (iv) The computer laboratory instructor prepares a list of students expected to attend a given practical lesson. If the students cannot fit in the laboratory, the computer laboratory instructor prepares the list in groups and allocates time to the groups appropriately i.e. when the students are available to take the practical lessons.
- (v) Only the students scheduled for the practical lesson are allowed in the laboratory. To enforce this condition, the laboratory attendant maintains lists of all the students scheduled for practical lessons.



