REPUBLIQUE DU CAMEROUN
Paix – Travail – Patrie
- . - . - . -
UNIVERSITÉ DE YAOUNDÉ I
Faculté des Sciences
Département d'Informatique
B.P. 812 Yaoundé

REPUBLIC OF CAMEROON
Peace – Work – Fatherland
- . - . - . -
UNIVERSITY OF YAOUNDÉ I
Faculté des Sciences
Department of Computer Science
P.O.Box 812 Yaoundé

ICT303: Data Communication

Department	Computer Science
Program	Bachelor L3
Course Code	ICT303
Course Title	Data Communication
Year of Study	2022 - 2023
Semester	S1
Course Delivery	On-Site (Face-to-Face)
Session	Sept-Dec
Room	
Instructor	Dr. Aminou Halidou
Email	aminouhalidou@gmail.com
Mobile	677-916-121 // 656-534-495

Course Description

Data communications (lower layers network) refers to the transmission of this digital data between two or more computers and a computer network or data network is a telecommunications network that allows computers to exchange data. The physical connection between networked computing devices is established using either cable media or wireless media. The best-known computer network is the Internet. This unit of study aims to develop an understanding of the how data communication is achieved in networks, an overview of security issues related to data communication in networks and an understanding of how to write network applications.

Objectives

Upon successful completion of this class, students will be familiarize with the concept of data communication, communication signals and their characteristics, transmission media and their characteristics, basics of multiplexing and switching, network security.

Credit Hours

3H

Profile

Third year of bachelor students of computer sciences (professional)

Course Syllabus & Weekly Plan

Lectures	Lecture Topics	CM	TD	ENSEIGNANT
Lecture 1.	Data Communications, Data Networking, and the Internet			
Lecture 2.	Data Transmission			
Lecture 3.	Transmission Media			
Lecture 4.	Signal Encoding Techniques			

Lecture 5.	Error Detection and Correction			
Lecture 6.	Network Protocols and Communications			
	Continuous Assessment			
Lecture 7.	Data Link Control Protocols			
Lecture 8.	Bandwidth Utilization (Multiplexing and Spreading)			
Lecture 9.	Switching			
Lecture 10.	Information Theory and Coding			
Lecture 11.	Internet Security			
	Final Exam			

	Assessment	**Grading**
1.	Continuous Assessment	20%
2.	Practical Exam	40%
3.	Semester Final Exam	40%

Appeals

Students who wish to appeal a grade must do so within one week of receiving the grade

Recommended Textbooks

1. ***Data and Computer Communications***, "Eighth Edition" William Stallings
2. ***TCP/IP Protocol Suite,*** "Fourth Edition" Behrouz A. Forouzan
3. Cisco Networking Academy Program Introduction to Networks v6.0
4. **Data Communications and Computer Networks A Business User's** "Approach Eighth Edition" Curt M. White
5. **Data Communications and Networking** "4th Edition" Behrouz A. Forouzan